

# BUSINESS WEEK

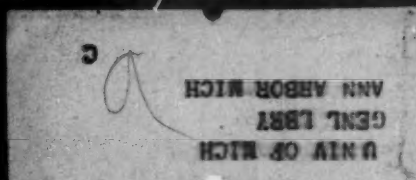
JUNE 26, 1948

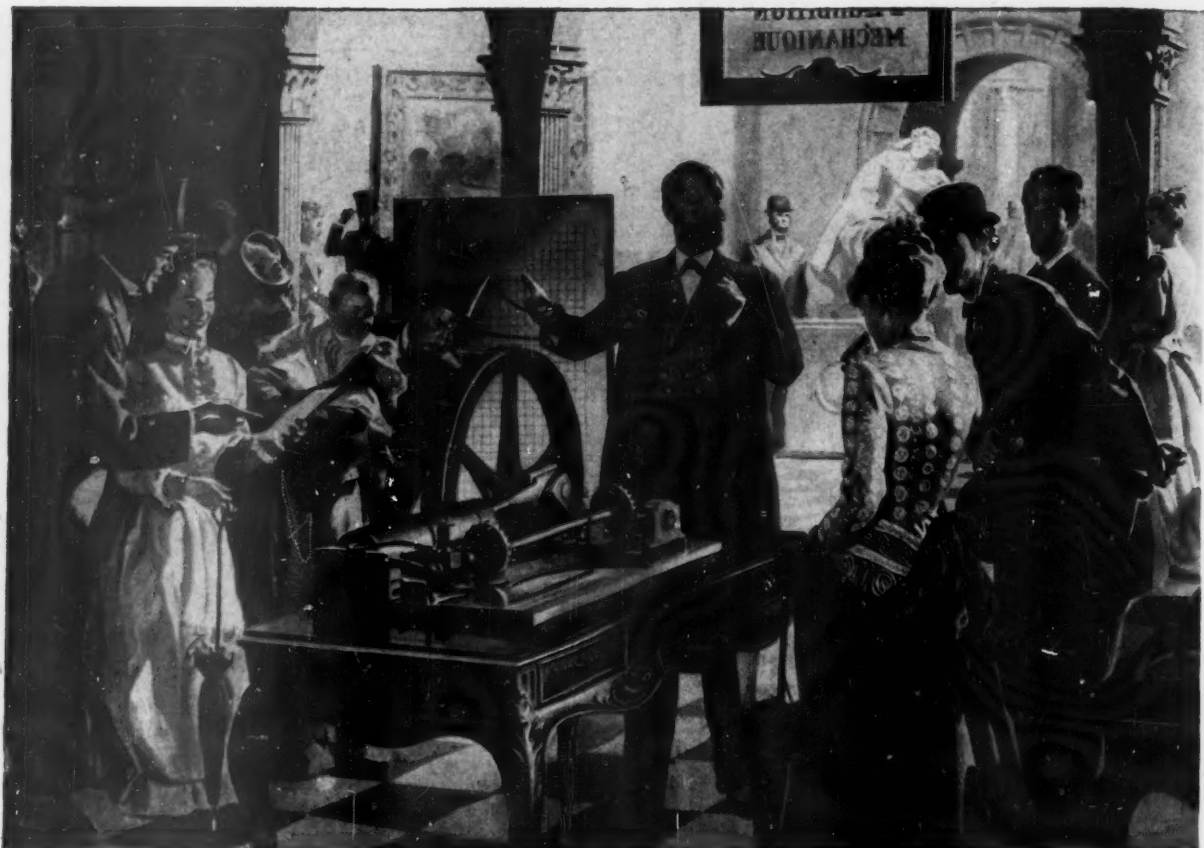


Langbourne M. Williams, Jr. — His job: to help boost production in Marshall Plan countries (page 6)

BUSINESS  
WEEK  
INDEX

A MCGRAW HILL PUBLICATION



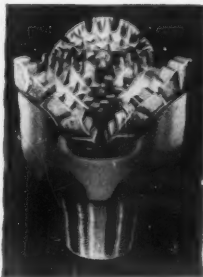


## *The Cavalcade of Oil*

NUMBER SEVEN OF A SERIES

**OTTO'S ENGINE** exhibited at the *World's Fair* at Paris in 1867. Although despised for its crude appearance and noisy operation, it ran with less than one-half the fuel required for others exhibited. This success led to orders for some five thousand of these engines.

The invention of the gas engine and the subsequent developments of that machine are of the greatest significance to the world's production of oil. Almost two centuries passed from the time of the first internal combustion experiments in 1685 until a successful commercial gas engine was developed by the Frenchman, Lenoir, in 1860. This initial success in developing internal combustion power was climaxed by the invention and development of the four cycle gas engine by Nicholas Otto and Eugene Langen in 1864, and the modern gas engine was born. Adaptation of this original combustion engine principle has resulted in today's gigantic automotive and aircraft engine industries.



The popularity of the four cycle gasoline engine led to its many uses for power which, in turn, necessitated volume production of fuel oil. The invention of the Hughes Rock Bit in 1909 implemented the drilling industry with a means of drilling through previously impenetrable rock strata to produce unheard-of quantities of oil at unprecedented drilling depths. Expanded oil discoveries meant low-cost motor fuel and mass production of automobiles, which sparked American economy and prosperity to the highest levels in world history. For nearly a half century Hughes Rock Bits and other Hughes oil-field products have been known everywhere as "WORLD STANDARD OF THE OIL DRILLING INDUSTRY."

**HUGHES TOOL COMPANY**  
HOUSTON, TEXAS

WORLD STANDARD OF THE INDUSTRY





General American operates the world's greatest public tank storage system for liquids. Terminals are strategically located at Carteret, N. J., Houston and Corpus Christi, Texas; and Goodhope and Westwego, La.



## **GENERAL AMERICAN** is using its production facilities at full capacity to serve you better

We at General American recognize the all important job of producing more equipment to meet the growing demand for our leasing facilities. Our manufacturing operations have been enlarged . . . productive capacity and effort have been stepped up in our work to

keep pace with this steadily growing demand.

To the nation's shippers, General American pledges to continue its expansion program as fast as available materials permit . . . to continue in our efforts to provide adequate transportation and storage facilities for you.

**GENERAL AMERICAN TRANSPORTATION CORPORATION**  
135 South La Salle Street • Chicago

DISTRICT OFFICES • Buffalo • Cleveland • Dallas • Houston • Los Angeles • New Orleans • New York • Pittsburgh  
St. Louis • San Francisco • Seattle • Tulsa • Washington • EXPORT DEPT., 10 East 49th Street, New York 17, New York



**A Truck Body  
Built for the Job  
Pays You!**

**DURABILITY**—Compactness—Strength  
—Speed of Delivery—Ease of Repair  
—Interchangeable Parts—from a Nation-  
wide Service. For your trucks, these advan-  
tages mean three things:

1. Maximum Payload—always.
2. Maximum Load Protection—always.
3. Minimum Lay-up Time—for repairs.

To assure you of these values, a leading body builder in your area is a Lindsay Body Builder. He meets your exact requirements—gives you the advantage of LS mass production—and joins with 207 other leading builders to give you Nationwide Service. **Write for information. The Lindsay Corporation, 1728 25th Ave., Melrose Park, Ill. Sales Offices: Chicago, New York, San Francisco.**



**LINDSAY <sup>LS</sup>  
STRUCTURE**

U. S. Patents 2017629, 2263510, 2263511  
U. S. and Foreign Patents and Patents Pending

## 7 GOOD REASONS For Lindsay Bodies

1. **EASE OF REPAIR.** A Lindsay Body can be repaired quickly—damaged panels easily removed—replacements available from warehouse stocks.
2. **NATIONWIDE SERVICE.** There are 207 authorized Lindsay Body Builders, thus, you can get complete factory service on any Lindsay Body any place in the country. Your branch offices can also buy new bodies locally and know that they conform in every way to your standard specifications.
3. **SPEED OF DELIVERY.** Lindsay Bodies—one or a hundred—are built in record time. This modern method of assembly is ideal for line production.
4. **STRENGTH & SAFETY.** LS has an amazingly high strength-weight ratio. A Lindsay Body withstands wear—saves weight, increases payload.
5. **APPEARANCE.** The rugged beauty of LS is adaptable to your individual design requirements.
6. **UNIFORMITY.** Units in your fleet can be identical yet built in entirely different parts of the country.
7. **EXPERIENCE.** Lindsay Bodies stand the test of actual service. The strongest and most frequently heard reason given for the purchase of Lindsay Bodies last year was—"We've used them before."

## BUSINESS WEEK

### EDITOR

Ralph Smith

### EXECUTIVE EDITOR

Kenneth Kramer

### MANAGING EDITOR

Edgar A. Grunwald

### ASST. MANAGING EDITOR

Harry Lee Waddell

News Editors, Cora Carter, Richard M. Machol, Carl Rieser, Guy Shipley, Jr. • Illustration, Jacquelyn Judge, C. Peter Davis

### DEPARTMENT EDITORS

Business Outlook, Clark R. Pace • Business Policy, John L. Cobbs • Finance, William McKee Gillingham • Foreign, Howard Whidden • Labor, Merlyn S. Pitzele • Law, Joseph A. Gerardi • Marketing, Frank J. Cogan • Production, John Sasso • Agriculture, Arthur L. Moore

### EDITORIAL ASSISTANTS

J. P. Chamberlain, Jane E. Clark, Jean Drummond, Mary Flaherty, Frank J. Fogarty, John Hartshorne, John Hoffman, Nathaniel McKitterick, Jane C. Neiderque, Atlanta, Marketing Editor, Arthur Richter, Edward T. Townsend (Asst. Labor Editor), Doris I. White • Statistician, Gertrude Charloff • Librarian, Mildred L. Washburn

### ECONOMICS STAFF

Dexter M. Keezer, Sanford S. Paiker, William F. Butler, Peter French, Robert P. Ulin

### DOMESTIC NEWS SERVICE

Chicago Bureau, James M. Sutherland, Mary B. Stephenson • Cleveland Bureau, Robert E. Cochran • Detroit Bureau, Stanley H. Brams, Ruth Cain • San Francisco Bureau, Richard Lamb, Mardell Burns • Washington Bureau, George Doying, Glen Bayless, Robert B. Colborn, Thomas A. Falco, Carter Field, Joseph Gambatese, Seabrook Hull, Louise Jacobson, Sam Justice, Paul Leach, Jr., Donald O. Loomis, Gladys Montgomery, Caroline Robertson, Vincent Smith, William B. Whitchard, Jr. • Correspondents: Akron, Albuquerque, Atlanta, Baltimore, Bangor, Birmingham, Boston, Buffalo, Charlotte, Cincinnati, Dallas, Denver, Des Moines, Evansville, Houston, Indianapolis, Kansas City, Knoxville, Los Angeles, Louisville, Madison, Memphis, Miami, Minneapolis, New Orleans, Oklahoma City, Omaha, Philadelphia, Pittsburgh, Providence, Richmond, Rochester, Salt Lake City, Seattle, St. Louis, Topeka, Tucson, Wichita, Wilmington, Fairbanks (Alaska), San Juan, (P.R.), Honolulu (T.H.)

### FOREIGN NEWS SERVICE

Director, John F. Chapman • London, Frederick Brewster, Randle Elliott • Paris, Michael Marsh • Berlin, John Christie • Moscow, Andrew Steiger • Tokyo, Alpheus Jessup • Bombay, Joseph Van Denburg, Jr. • Melbourne, Herbert Leopold • Rio de Janeiro, Henry Bagley • Buenos Aires, John Wilhelm • Correspondents: Amsterdam, Bangkok, Batavia, Bogota, Cairo, Caracas, Copenhagen, Geneva, Johannesburg, La Paz, Lima, Manila, Mexico City, Milan, Montevideo, Ottawa, Prague, Santiago, Shanghai

### PUBLISHER

Paul Montgomery

### ADVERTISING MANAGER

H. C. Sturm

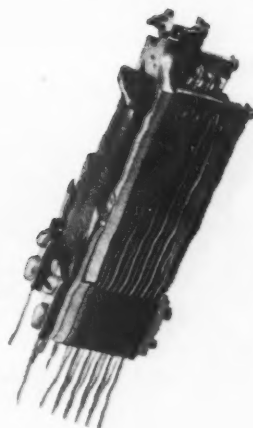
BUSINESS WEEK • JUNE 26 • NUMBER 982

(with which are combined The Annalist and the Magazine of Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder • Publication Office 99-129 North Broadway, Albany 1, N. Y. Return postage guaranteed • Editorial and Executive Offices, 330 W. 42nd St., New York 18 • James H. McGraw, Jr., President; Curtis W. McGraw, Vice-President and Treasurer; Eugene Duffield, Executive Assistant for Publications; Nelson Bond, Director of Advertising; Joseph A. Gerardi, Secretary. Address correspondence regarding subscriptions to J. E. Blackburn, Jr., Director of Circulation, Business Week, 99-129 N. Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 18. Allow ten days for change of address.

Subscriptions to Business Week are solicited only from management-men in business and industry. Position and company connection must be clearly indicated on subscription orders. Single copies 30c. Subscription rates—United States and possessions \$5.00 a year. Canada \$6.00 a year. Pan American countries \$10 a year • All other countries \$20 a year • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879 • Printed in U. S. A. Copyright 1948 by McGraw-Hill Publishing Co., Inc.—All Rights Reserved.

BUSINESS WEEK • June 26, 1948

Telephone Relay  
about  $\frac{3}{8}$  actual size



# 1000 for a Nickel



**W**HEN you drop a nickel in a pay station and dial a call—or dial from home or office—as many as 1000 telephone relays go into action.

The relay is the little device illustrated above—an electrical switch that works far faster than you can wink. You probably don't know it exists. But you couldn't make a telephone call without it.

These relays leap into service when you telephone, opening and closing circuits. They operate millions of times in their lifetime.

Bell Telephone Laboratories designed this relay and some of the Laboratories' best scientific minds are spending all their time improving it.

Is it worth while to assign such great talent to so small a device?

Here is the answer: There are more than 100,000,000 relays in the Bell System and they represent one dollar out of every six spent for equipment in dial telephone exchanges.

Design changes by Bell Telephone Laboratories have already saved millions of dollars in cost and greatly improved telephone service. It is this kind of research, especially in a time of rising costs, that helps keep your Bell System telephone service low in price.



## BELL TELEPHONE SYSTEM

**BELL TELEPHONE LABORATORIES** *A great research organization, working to bring you the best possible telephone service at the lowest possible cost*





## Why fill your freezer with space-hogging insulation?

Believe it or not, the insulation in your ordinary home freezer has actually been taking up more cubic measure than the space left for storage!

**But not any more... not with Santocel!** Thicknesses of walls and doors can be cut in half with this modern chemical insulation, without loss of efficiency.

If you make or use freezers or any kind of refrigerating equipment, it will pay you to know more about Santocel.

### SANTOCEL SAVES SPACE

Monsanto Chemical Company, Merrimac Division,  
Dept. WBM 13, Boston, 49 Mass.

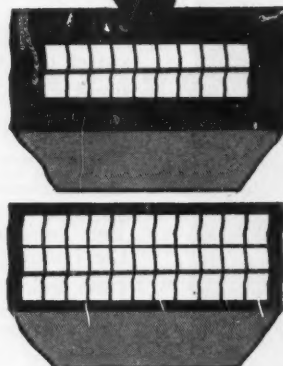
Please send me information on Santocel.

Name.....Title.....

Company.....

Address.....

City.....State.....



With Santocel insulation, the same sized freezer that once held 2½ cubic feet of food can double its capacity to 5 cubic feet.



Look for this seal on all equipment protected by "the world's most efficient insulation." Santocel: Registered trade name for Monsanto's silica aerogel. Not to be confused with moisture absorbing silica gel.



SERVING INDUSTRY... WHICH SERVES MANKIND

## THE DEPARTMENTS

Business Abroad .....	117
Business Outlook .....	9
Cities .....	28
Finance .....	89
International Outlook .....	115
Labor .....	100
Marketing .....	66
The Markets .....	98
New Products .....	52
Production .....	34
Readers Report .....	60
The Trend .....	124
Washington Outlook .....	15

## THE COVER

A key job for the Economic Cooperation Administration is rebuilding European industry. So when ECA Chief Paul Hoffman began casting about for someone to head his industry division in Europe, he naturally looked for a man with wide experience.

• **Sulphur Executive**—He found him in the presidency of the Freeport Sulphur Co.—Langbourne M. Williams, Jr. Last week Williams took off for Paris to start the wheels turning. How he does it will be of interest to many a U. S. industry. For example, Williams is the man whom U. S. machine-tool makers will be watching closely; they will learn from him what the basic needs are in Europe, and what will be done to fill them.

Williams is well-qualified for his new job. Relatively young (45), he has a varied background. After graduating from the University of Virginia, he took his Master of Business Administration at Harvard's Graduate School of Business Administration. In 1926 and 1927, he worked for Lee, Higginson & Co., investment banking house. Then, until 1930, he was associated with the family banking firm of John L. Williams & Sons, Richmond, Va.

• **Industrial Background**—His chief industrial experience comes from Freeport Sulphur. He joined the company in 1930 as vice-president and treasurer. And three years later—at the age of 30—he became president.

Being tied up for so long with a sulphur company is a real education. A basic industrial commodity, sulphur and its products are used in everything from fertilizer and pigments to oil refining and the manufacture of metals.

• **Other Contacts**—Williams has kept in close touch with industry in other ways, too. He is a trustee of the Bank of New York, a director of B. F. Goodrich Co., a trustee of the National Industrial Conference Board. Meantime, he has also interested himself in other than business affairs: He is a trustee of the American Church Institute for Negroes, a member of the Council on Foreign Relations.

# BUSINESS OUTLOOK

BUSINESS WEEK

JUNE 26, 1948



Business planning will have a Republican tinge the rest of this year.

It isn't that business can look for any real changes in ground rules after November; it's mainly the prospect of a friendlier atmosphere.

The only serious weakness now visible in business is in consumers' soft goods—and this may be near a turning point.

News from textiles, doleful a week ago, now is brightening some.

Retailers have been on a long buying strike. Mills curtailed operations as a result.

Middlemen were literally and figuratively in the middle. They were stuck with burdensome inventories; banks pressed them on their loans.

But this week New York's Worth Street, beehive of middlemen, was breathing easier. Sales, at least temporarily, were picking up.

Soft goods were in a mild recession a year ago. This year's seems to be a bit more painful. Yet it poses no over-all business threat.

What we are up against is a return to more normal sales. The situation is what the Cleveland Trust Co. describes as the "piecemeal catching up with deferred demand." Sales are returning to a replacement basis.

Men's shirts are just one sample. Manufacturers complain that they can't afford to cut a shirt for what it will bring today.

New orders booked by manufacturers of nondurable goods fell below a year ago in both March and April.

And remember, these figures are in dollars, not in units. Since prices now are higher than last year, new orders in units must have fallen off more than the dollar drop.

The value of nondurable shipments in March and April continued far above the same 1947 months. This, set off against the drop in new orders, must mean a very sharp cut in backlogs in most lines.

Paper is among the industries that finally is shaking down to its postwar size (which, though below the peak, still is huge).

Supply began to catch up with demand earlier this year. Now most types of paper and paper products are in balanced supply.

Sales of books and of many publications are down. Backlogs of demand from most other sources finally have been met. New orders are off.

June billings, nevertheless, continue very high. Mills in many cases are cutting operations, though, for fear of cancellations; some customers probably did a bit of hoarding during the prolonged period of shortages.

Paper companies catering to small print shops soon may face a collection problem. This is long-profit business. However, small shops are squeezed on high labor and material costs. Profits are vanishing.

Suppliers of paper will have to help them work out their difficulties—or go into the printing business, which isn't a general policy.

Other segments of the economy feel none of the shrinkage that is afflicting a few of the soft goods lines.

Heavy industry and construction, in particular, are booming along. Farm prices haven't regained their January highs (with a few notable excep-

# BUSINESS OUTLOOK (Continued)

BUSINESS WEEK

JUNE 26, 1948

tions, such as steers); yet the average for farm products continues ahead of 1947—thus sustaining farmers' incomes.

Labor troubles seem to be largely behind us. Coal is probably an exception (and even there, this week's court decision on pensions may make for peace).

Inventory accumulation has slackened—or maybe stopped—without any perceptible effect on production of raw materials or their prices.

The Dept. of Commerce suggests an explanation for this. It isn't that manufacturers have curtailed their buying; it's more that they're moving end products as fast as they can get in raw materials and parts.

This could very well be true in durable goods lines. Strong prices for almost everything manufacturers buy would bear out Commerce's analysis.

Zinc, by the way, this week seemed poised for another price increase.

Profits in a few consumer goods lines will be lower this year than last. The aggregate for all business, though, will be up.

This, at least, is the opinion expressed in the current Federal Reserve Bulletin.

One clear implication from that is: no recession in 1948. With this, most business men undoubtedly will agree; as to the profits forecast, it is likely that there is somewhat less unanimity.

Housing will have to go some the rest of this year to come up to the optimistic expectations held for it.

New dwelling units started in the first five months totaled 350,000. Washington's goal is 950,000 for the year. That leaves 600,000 to be started in seven months—higher than any full year between 1928 and 1941.

The way things were going in April and May, this can be reached. The main worry, though, is possible tightness in mortgage money (page 19).

Construction will be hampered to some extent by the Pacific Northwest floods (page 20). Many mills there have lost a month's lumber output.

Eastern markets have difficulty getting any but the lower grades of western white pine lumber. Prices in some cases are 10% to 15% above those prevailing the first of the year—up as much as \$40 a thousand.

An eastern dealer has just received a water shipment of fir at \$87.50, bought on the West Coast three months ago. Price today: \$93.50 to \$95.

Akron was maintaining an expressive official silence on tire prices early this week. But nobody was being fooled. A rise of perhaps 5% is imminent on auto and truck tires, somewhat larger on farm tractor tires.

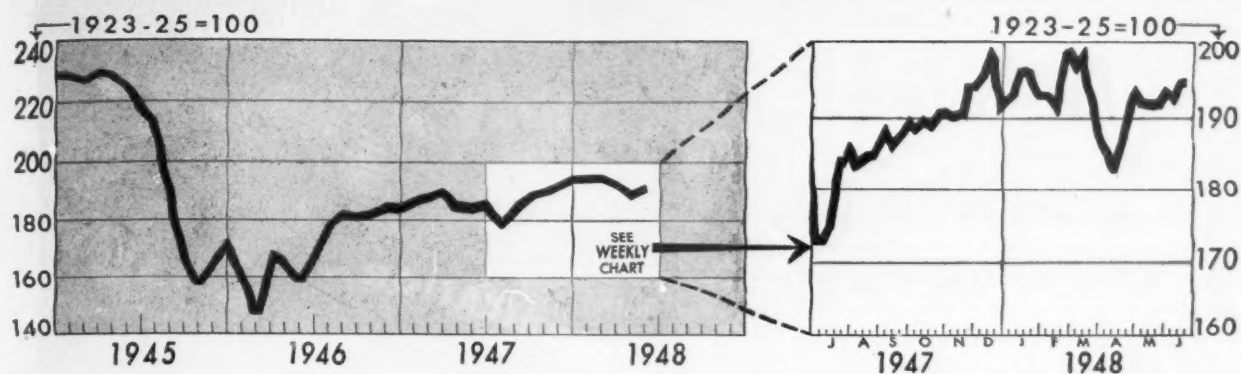
Exports of American wheat gradually are taking on as much the aspect of supporting prices at home as of dispelling hunger abroad.

We enter the new crop year officially July 1. By then, we will have shipped upwards of 575-million bu. of grains; exports through May 31 totaled 537-million.

And wheat prices still are down close to the government support level.



# FIGURES OF THE WEEK



**Business Week Index** (above) . . . . . \*195.3 †195.3 192.9 186.3 162.2

## PRODUCTION

Steel ingot operations (% of capacity).....	96.2	96.0	96.8	95.6	97.3
Production of automobiles and trucks.....	107,699	†109,831	91,138	102,545	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$25,927	\$27,217	\$22,299	\$21,549	\$19,433
Electric power output (million kilowatt-hours).....	5,159	5,132	5,085	4,676	3,130
Crude oil (daily average, 1,000 bbls.).....	5,492	5,480	5,439	5,115	3,842
Bituminous coal (daily average, 1,000 tons).....	2,217	†2,371	2,208	2,099	1,685

## TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	82	84	79	84	86
All other carloadings (daily average, 1,000 cars).....	69	67	62	66	52
Money in circulation (millions).....	\$27,808	\$27,864	\$27,690	\$28,195	\$9,613
Department store sales (change from same week of preceding year).....	+1%	-4%	+8%	+6%	+17%
Business failures (Dun & Bradstreet, number).....	100	110	92	70	228

## PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	437.0	427.5	425.7	402.3	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	277.0	276.2	275.3	261.2	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	399.1	394.6	389.7	359.3	146.6
Finished steel composite (Steel, ton).....	\$80.27	\$80.27	\$80.27	\$69.82	\$56.73
Scrap steel composite (Iron Age, ton).....	\$40.66	\$40.66	\$40.66	\$34.75	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	21.500¢	21.500¢	21.500¢	21.500¢	12.022¢
Wheat (Kansas City, bu.).....	\$2.26	\$2.31	\$2.39	\$2.32	\$0.99
Sugar (raw, delivered New York, lb.).....	5.38¢	†5.24¢	5.14¢	6.19¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	36.95¢	37.10¢	37.78¢	37.31¢	13.94¢
Wool tops (New York, lb.).....	\$2.012	\$2.011	\$1.977	\$1.506	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	22.97¢	22.70¢	23.31¢	15.11¢	22.16¢

## FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	134.1	134.8	131.4	120.0	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.34%	3.34%	3.35%	3.22%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.75%	2.74%	2.76%	2.56%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½%	1½%	1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½%	1½%	1½%	1%	1-1½%

## BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	47,259	46,996	46,440	47,035	††27,777
Total loans and investments, reporting member banks.....	63,085	63,426	63,456	63,406	††32,309
Commercial and agricultural loans, reporting member banks.....	14,245	14,152	14,208	11,754	††6,963
Securities loans, reporting member banks.....	1,715	1,819	1,574	2,227	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	35,250	35,667	35,866	39,246	††15,999
Other securities held, reporting member banks.....	4,220	4,195	4,234	4,088	††4,303
Excess reserves, all member banks.....	1,170	920	330	750	5,290
Total federal reserve credit outstanding.....	21,519	20,955	20,674	21,797	2,265

\*Preliminary, week ended June 19th.

†Revised.

††Date for "Latest Week" on each series on request.  
††Estimate (B.W.—Jul. 12/47, p. 16).

# Undivided Responsibility...

## IN BUILDING CONSTRUCTION

The "bone work" of a building starts in our shops with beams, angles, channels, plates, and shapes.

They are riveted or welded into structural members according to your plans and specs. The fabricated units arrive on the building site ready for erection by our crews in record-breaking time. The responsibility is undivided.

Three completely equipped fabricating shops with a multiplicity of equipment work together to get your job through on time.

Our principals will be glad to consult with you on your building requirements from bridges to buildings of all types, involving the use of fabricated structural steel.

Numerous orders are in work now but extreme manufacturing flexibility enables us to meet most delivery requirements.

FROM FABRICATION...

TO ERECTION



# 3

STRUCTURAL FABRICATING PLANTS

WORKING AS ONE HUGE OPERATION

PLANTS • CLINTON BRIDGE WORKS, Clinton, Iowa  
• GAGE STRUCTURAL STEEL CO., Chicago 8, Ill.  
• MIDLAND STRUCTURAL STEEL CO., Cicero 56, Ill.

(MAIL ALL INQUIRIES TO THIS ADDRESS) →



# WASHINGTON OUTLOOK



**WE DON'T KNOW**, as we write this week, the name of the man who almost certainly will be your next president. You undoubtedly do know, as you read this page.

From now on, all the emphasis is on the candidate. All Republicans are for him. All Republicans endorse the platform.

But don't forget that there was more to Philadelphia than picking a name. The convention was deciding what kind of Republican Party is going to take over the government in 1949—the New Guard or the Old Guard.

The line between the two groups was unmistakably drawn in the last weeks of Congress on the foreign issue—between those who take a world view and those who take a strictly national view.

Domestically, the line is fuzzier—between "enlightened" Republicanism and old-fashioned conservatism. Issues like housing and social security come closest to giving you the lineup here.

You can spot Speaker Joe Martin, Sen. Bricker, and Gov. Green, for instance, clearly in the Old Guard. Taft jumps back and forth in the middle, not quite keeping step with Vandenberg on world matters but often leading the new guard on social-welfare stuff. Dewey, Vandenberg, Stassen, and Warren—these were the candidates of the New Guard.

The New Guard wrote the G.O.P. platform.

**WHAT CONGRESS DID** and didn't do—is the real platform on which the Republicans must stand before the voters next fall.

Even the G.O.P. platform composers in Philadelphia knew this; they kept the long-distance phone humming all through the frenzied 44-hour windup on Capitol Hill last week end—"you've got to give us something on housing" . . . "something on farming" . . .

In the 80th Congress Republicans had their first chance to legislate since 1930. What did they do?

They changed the direction of federal policy on three fundamental domestic subjects:

**Labor**—They put through the Taft-Hartley law. After 14 years of pro-labor government, it used the federal power to strengthen management's hand in collective bargaining.

**Taxes**—They reversed the New Deal tax

policies of (1) soaking the rich, and (2) using taxes as social and economic regulators. Over the third Truman veto, the G.O.P. gave upper-bracket taxpayers their first real relief in years; and, in doing so, they ignored Truman's plea for a big surplus to fight inflation.

**Economic Control**—The 80th Congress was willing to give economic forces their head. Time after time, they ignored Truman's urgings for limits on rising prices, for government distribution of scarce stuff, for a check on the volume of credit.

By this very inaction, the Republicans turned government's relations with business in a new direction.

On foreign policy, the Republican Party itself swung to a new direction.

The swing is incomplete; the G.O.P. is still deeply divided on the world policy hammered out jointly by the Administration and the Vandenberg Republicans.

In the 80th Congress, Vandenberg's influence rammed through a whole series of moves treating the United States as a World Power, rather than a Hemisphere Power. This historic shift away from the Monroe Doctrine had several aspects:

**Economic**—First came interim aid. Then the Marshall Plan itself was fashioned as a long-range rehabilitation policy, with few niggling restrictions. Each time there was, of course, the subsequent intra-G.O.P. scrap over money, but each time the dollars were provided.

**Alliances**—The Republicans underwrote the Truman Doctrine that put this country practically into a military alliance with the governments of Greece and Turkey. Then, the G.O.P. forced on Truman an almost identical tieup with the Kuomintang government of China.

Finally, in the closing days of the session, the Senate invited the Administration to try its hand at working out a military-political alliance with the western European union.

**Military**—Congress agreed with Truman that this sort of positive foreign program calls for some strengthening of the military arm. But it disagreed on the mechanics. It approved the draft but turned down Universal Military Training; it gave Truman the extra money he asked for, but earmarked more of it for airplanes than he wanted.

There you have what the 80th Congress affirmatively did on fundamentals.

What it did not do is also a part of the record



# WASHINGTON OUTLOOK (Continued)

that Republicans have to stand on. The big gap is social-welfare legislation. For two years, the Republicans had before them measures:

(1) To set up a long-range program of federal aid to housing.

(2) To broaden coverage of social security and increase benefits.

(3) To provide federal subsidies to equalize educational opportunities among the states.

(4) To establish federal insurance against the hazards of sickness.

(5) To increase the legal minimum wage.

None of these got through. Each one had more or less vigorous support from Taft's Senate leadership. But each met too much party division to become law.

On two controversial economic questions the Republicans deliberately deferred a permanent decision until the next administration:

**Tariffs**—The Hull Reciprocal Trade program squeezed through for another year, mostly for its psychological effect abroad. And the Senate simply failed to act on U. S. adherence to the U. N. International Trade Organization—which would have committed the nation to the principle of free trade.

Thus, the Republicans gave themselves another year to decide whether they are still a high-tariff party.

**Farm policy**—Essentially, Congress merely continued the war-incentive price support program another year. After deadlocking right down to the adjournment hour, the House and Senate "compromised": It extended the Steagall amendment for a year and tacked on a lower, flexible support system to become effective in 1950.

That leaves time next year to review the whole range of government-agriculture relations.

Many of the less pretty aspects of the record of the 80th Congress trace to the fact that the President has been of the opposite party.

It was a constant temptation to snipe—or snipe back—at the Administration.

So you had such spectacles as Congress arbitrarily ducking action on presidential nominations to the Atomic Energy Commission; ousting Reclamation Commissioner Straus by an appropriation-bill rider; dismantling the Labor Dept.

Then there was Congress' running feud with the Supreme Court; the G.O.P. was ferreting out

New Dealism wherever it found it—and all the justices are Roosevelt- or Truman-named.

Congress rewrote court law (1) to exclude news vendors from social security coverage, and (2) to throw out portal-to-portal pay suits under the wage-hour law.

It cut in ahead of the court on the antitrust action to break up railroad rate bureaus, by explicitly legalizing them over Truman's veto (page 22). It launched a big investigation of the court's sweeping basing-point decision, laying the foundation for legislation next year.

Only the last-minute legislative crush prevented action to overturn the court's award of tidelands to the federal government, and its "overtime-on-overtime" decision; they'll be up next year.

For the record, here are some of the comparatively minor—but still important—measures which the 80th Congress approved, or disapproved:

**Synthetic Rubber**—Control of production and use continued for two years.

**Census of Business**—Authorized for next year; results will be available in 1950.

**Science Foundation**—House failed to act.

**TVA Steam Plant**—Defeated.

**RFC**—Extended for another two years.

**Margarine Tax Repealer**—Lost in the shuffle.

**Controls**—Rents kept under ceilings; tin and antimony, rice, fats and oils under allocation. Draft law gives priority to military orders and to steel for filling them—a provision slipped in at the last minute, intended as a sop to small business.

**Communists**—Mundt-Nixon bill died in Senate committee.

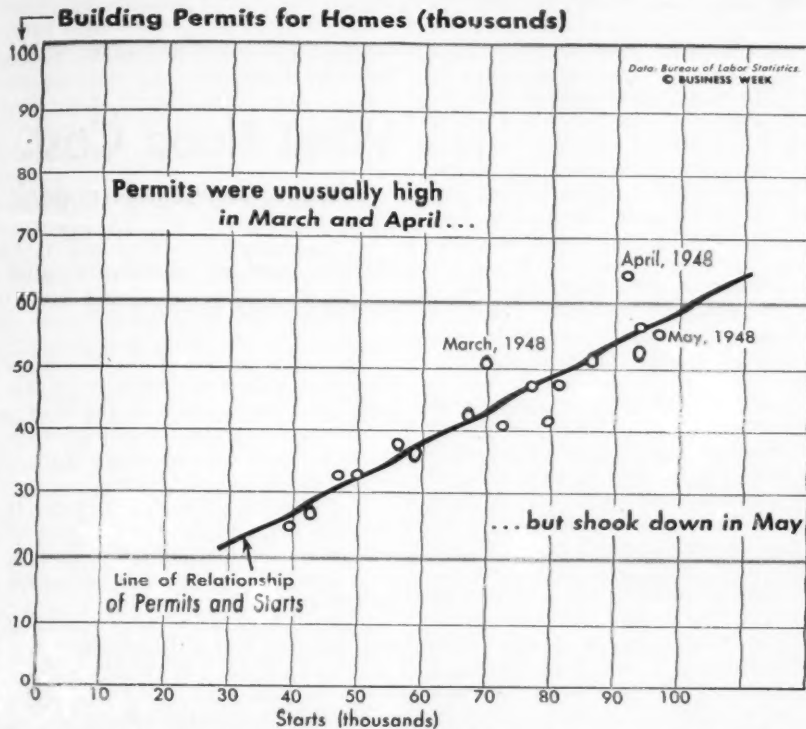
**Business Taxes**—Technical revision bill put over to next year.

**Renegotiation**—At Forrestal's option, all 1949 military contracts are subject to profit review.

**Allocation**—Authorized any industry to get together with government on an allocation program without tangling with the trust-busters.

This may not be the final record of the 80th Congress. One way or another, this Congress probably will be back in session before Election Day.

There are enough loose ends dangling to give either Truman or the C.O.P. leaders an excuse to reconvene the session. Remember, until next January half-completed legislation can pick up where it left off; after that, the 81st Congress will have to start all over again on everything.



PERMITS AND STARTS for new residential buildings bore a fairly constant relation to each other until March and April of this year. This is shown by the line of relationship (fitted by least squares method to data for the last 17 months)

## Is Building Boom Ending?

The drop in number of residential permits issued might be first signal. But most builders feel that figures are more a statistical accident than a clew to the future—especially since starts are high.

The nation's housing boom this week climbed toward its summer peak going stronger than ever. But the wheels of the bandwagon are squeaking a little. Builders are wondering if there is trouble ahead for them in the second half of this year.

The main problem now is mortgage money (BW—May 8, 48, p. 19). Everyone in the building business is worried about it. No one knows just how serious it really is.

• **Title VI Dies**—When Congress adjourned at dawn last Sunday, dismayed builders realized that it had not extended Title VI of the National Housing Act. Title VI has been one of the main props under the mortgage market during the postwar boom. Under it, the Federal Housing Administration has been guaranteeing home mortgages up to 90% of current construction costs (with an upper limit of \$8,100).

Title VI expired on Mar. 31. Congress first extended it for 30 days but changed the basis of appraisal from current costs to long-term value. The industry considered that a heavy enough blow. Now it has to face the unhappy fact that Title VI is out the window entirely. And there is no telling when—if ever—Congress will revive it.

• **Permits Drop**—This jolt hit the industry just when many builders were running an uneasy eye over the latest figures on housing starts and permits, compiled by the Bureau of Labor Statistics. BLS figures show that starts took a good jump in May. Work got under way on a total of 97,000 new dwellings during the month—the highest on record. That is about 5,000 more than in April and nearly 25,000 more than in May, 1947.

But BLS estimates also showed a sudden drop in the number of residential

building permits issued during May. The total for the month was only 55,334, against 64,454 in April. Declines showed up in all parts of the country except the East North Central region and the Pacific Coast.

This drop in permits might foreshadow a drop in starts later in the year. It might be the first ominous signal that the end of the housing boom is drawing near.

• **Causes**—The chances are, though, that it is more a statistical accident than a clew to the future. Optimistic builders have at least three explanations of the dip in permits:

(1) The BLS figures contain many statistical bugs. One arises from the fact that building outside city limits often does not require a permit. Hence, the permit figures apply only to urban housing. Thus, building in the suburbs and rural areas could be picking up rapidly while construction inside the city limits was tapering off.

(2) Permits also took a slight dip in May last year—and then came back with a bang in the late summer and fall. They may very well be following the same pattern now. Prewar figures suggest that there is a tendency for permits to reach a peak in April, trail off a little in the early summer, and then pick up again.

(3) Apparently the number of permits issued in March and April this year was unusually large in relation to the number of starts. The chart above shows what happened. All through 1947 there was a fairly constant relation between the number of permits and the number of starts in a given month. But in March and April, 1948, permits shot up faster than starts. In May, when permits dropped off, they were only a little below their usual relation to starts for the month.

This suggests that many builders took out permits during the spring but delayed starting the work. Bad weather held up some of them. Others probably were hustling to get their projects approved before Title VI lapsed.

• **Estimates Are Hard**—It's hard to prove any of this statistically. The estimates of permits and starts are too rough to stand refined manipulation. And to a large extent the relation between permits and starts arises from the simple fact that permits are one of the factors that BLS uses in estimating starts. But the figures do suggest that builders piled up a backlog of unused permits during the spring of this year. And that could explain the sharp drop of permits in May.

The growing difficulty in getting

mortgage money is something else again. There is no statistical hidden-ball trick to explain that away.

• **Loaded Down**—Even before Title VI expired, builders and buyers found the mortgage market tightening up on them. With interest rates rising, private lenders don't find the low-rate insured mortgages attractive. (The rate on Title VI mortgages was 4%, plus  $\frac{1}{2}$ % for insurance.) And after two years of the housing boom, some lenders—particularly the commercial banks—now have all the mortgages that they want in their portfolios.

In some areas there has already been enough building to take the keen edge off the unsatisfied demand for housing. Where this has happened, the steady tightening of mortgage money may make a real difference in construction plans.

• **By Cities**—Take, for example, some of the cities for which BLS reported a marked drop in permits during May:

In Washington, D. C., builders think that the housing boom is slowing down at last; they say that the main trouble now is finding the money. Two rental projects of 200 units each have been held up since February because builders can't get them financed. There is nothing wrong with the builders' credit; they just can't find anyone who wants to lend them the money.

In Houston, Tex., experts say there is a "technical surplus" of rental units in the \$75 to \$150 bracket. What they mean is that families are doubling up or making out with smaller accommodations rather than moving into high rent units.

In Oklahoma City, builders think that much of the drop in permits during May is due to an increase in building outside the city limits. But several report that sales of new houses are not so brisk as they were a few months ago. They predict that home-building will fall off sharply next year if more Title VI insurance is not available. Right now they have enough FHA commitments to carry them about six months.

In New York, financing difficulties are multiplied because real estate is expensive, projects are often very large, taxes are high. This means big carrying charges, even when the mortgage terms are fairly liberal. Even so, builders think the drop in permits is only temporary.

• **Biggest in History?**—Outside of a few areas such as these the boom still shows no signs of faltering. And even in the cities where permits have dropped sharply, the volume of construction under way is far above last year. BLS experts still are betting on a total of 950,000 starts this year, which would make 1948 the biggest housing year in history.

Builders agree on one point, though:

They think that there will be less speculative construction from now on. As they see it, the man who ties up huge sums without having buyers in sight is taking too long a chance, with the market the way it is. From here on, they think, more and more builders will want the buyer's name on the contract before they start digging.

## What Flood Cost

**Raging Columbia River dealt heavy blow to Northwest industry. Lumber, aluminum, and farming were hardest hit.**

The raging waters of the Columbia River had pretty well died down by this week. And businessmen in the Northwest—and throughout the country—were trying to figure out how much the disastrous floods had cost them.

It is still too soon even to guess at the total loss. But the main outlines of the picture are already clear. Here is what happened to the region's principal industries:

• **Lumber**—Damage, while great, will be less than was feared. Lumbermen estimate an average loss of 15-million board feet a week for from four to six weeks.

At least 25 sawmills suffered serious damage. Others, undamaged, closed down for lack of logs. Weyerhaeuser and Long-Bell, at Longview, Wash., were not touched by water, but they throttled down just the same. Reason: The two mills are among the biggest in the world (50-million b. ft. a month), and the companies were afraid vibration of the heavy machinery would loosen the dikes between them and the Columbia. Many paper mills were forced to close.

• **Aluminum**—This industry was especially hard hit. Reynolds Metals Co. suspended operations at its Troutdale (Ore.) reduction plant when high water lapped dangerously near the top of protecting dikes. Fearful that water would get to sizzling hot potlines and cause an explosion, Reynolds shut down the plant and put its employees to work reinforcing the dikes.

Aluminum Co. of America's reduction plant at Vancouver, Wash., was also in danger of being flooded for a time. It kept going—but at a reduced rate, because the transportation tieup had shut off most of its raw materials. Reynolds' facilities at Longview, Wash., were never in much danger. But they, too, had to slow down because of lack of materials. Kaiser's Permanente Metals plants at Spokane were almost entirely unaffected.

• **Agriculture**—Preliminary estimates put the total damage to farms and buildings at \$21-million—about half of it in lost



## New Money for Western Germany

This week occupation chiefs in the three zones of western Germany opened up crates of new Deutschmarks—printed in the U. S. and addressed to Gen. Lucius Clay. They will replace Germany's inflated, 1923 Reichsmarks. The aim is to break the back of the black market (page 115). Mos-

cow's propaganda trumpets blared forth in opposition. Said Russia's Marshal Sokolovsky in Berlin: The currency reform "completes the division of Germany." And Russia got set to rejigger eastern Germany's money. Now the problem is: What currency will Berlin use?



crops and livestock. More than 200,000 acres of farm and grazing land were flooded.

• **Electric Power**—There's an old axiom in the power industry: In a disaster, load drops faster than capacity. The drop in power demand at the aluminum plants and in other flooded-out industries enabled the Bonneville Power Administration and other power producers to supply all needs. Steam plants had to bear a lot of the load, however, and energy was even brought in from Utah to help meet peaks.

Big hydro generators—like those at Bonneville and Grand Coulee—can go just as sour with too much water as with too little. When the stream backs up below the dam, it reduces the effective "head" of the water that spins the turbines. At Bonneville, the normal fall of 60 ft. was cut to 25 ft.; the generators, capable of 518,000 kw., slowed to 180,000 kw. Similar conditions at Grand Coulee cut output from 1,120,000 kw. to 950,000 kw.

Neither dam was in any physical danger. But there was damage to transmission facilities—particularly local distribution lines in some areas.

Private hydro facilities suffered as much as BPA's. At low-level projects, such as Puget Sound Power & Light Co.'s Rock Island dam, operations were suspended because of lack of head.

• **Transportation**—Extensive damage to railroad trackage into Portland was a serious blow, because Portland is the distributional nerve center of a broad area. The washout of the tracks along the fill at Vanport snapped the only direct line of communication between Portland and Seattle. Union Pacific discontinued service in the Columbia gorge between Portland and Hood River, Ore., because its tracks along the river bank were undermined. The main line of the Great Northern was washed out in ten places between Troy, Mont., and Bonners Ferry, Idaho.

Portland's \$6-million airport was under about 10 ft. of water. Luckily, the airlines had pulled out all movable equipment a week before.

• **Worst in History**—All in all, the flood was the worst in the Northwest's history. It was caused by a combination of unusual weather conditions. First, temperatures in April and early May were subnormal. Then, in mid-May, heavy rains and a sudden warm spell acted as a trigger. So all the snow that usually melts off over a period of two months melted all at once. The result was the highest stream flow since 1894. Diking since 1894 constricted the channel of the river and raised the level of the river bed. So, when the dikes broke—calamity.

Army engineers now want to build eight storage dams on the tributaries. They say this would have cut this year's crest by 9 ft., and avoided the flood.

## Stockpilars to Go Slowly

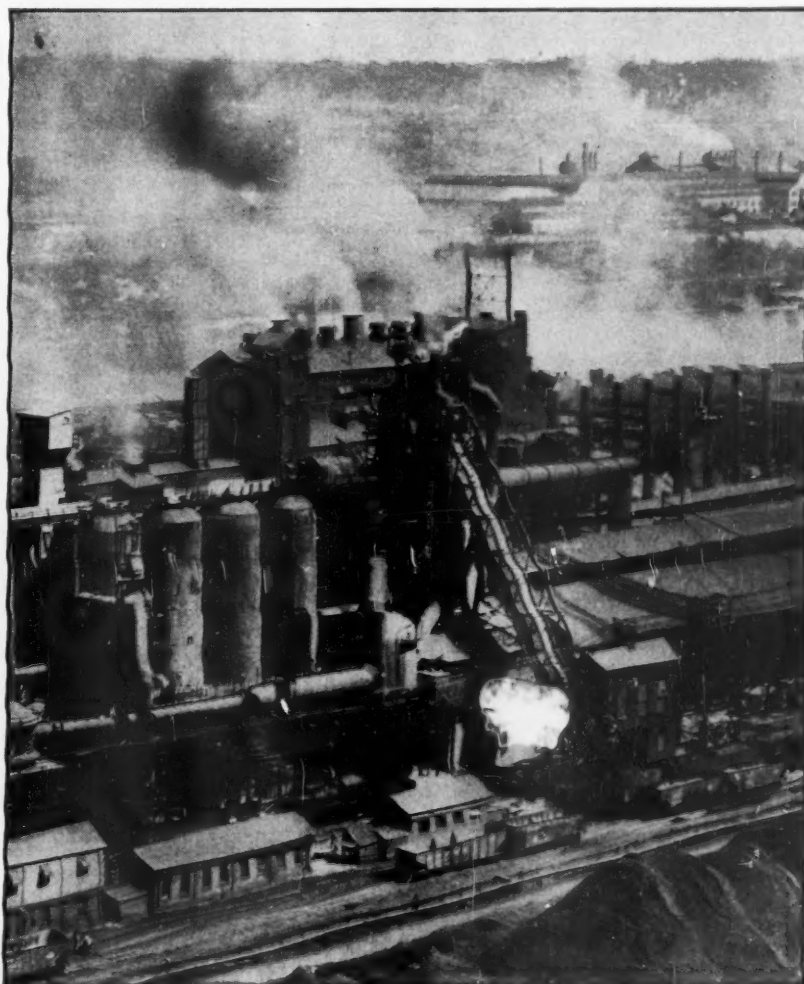
Mandate to lay off domestic market means industry can breathe easier under weight of \$600-million appropriation. And plan to subsidize marginal producers may help buyers and suppliers.

Many industries still have to fight for enough critical materials to keep running. But it was clear this week that they need not worry too much about the added competition that many feared the \$600-million appropriation for military stockpiling would bring.

• **Salvation**—True, this is three times as much money as Congress appropriated last year—the previous high. The big, and saving, "but" is: Stockpilars are under an unwritten mandate to go easy on the domestic market. President Tru-

man has told them, in effect, to "lay off"—under advice that controls wouldn't be needed if the markets were left to private buyers (BW—Jun. 12 '48, p. 15). And the stockpilars have a plan up their sleeves that may turn the appropriation from a menace to an aid for domestic consumers.

The appropriation is split 50-50; half of it represents cash, and half contract authority. The cash balance will be whittled by \$75-million at the outset of the buying program. That's the



### J. & L. Furnace Turns in Record Run

No. 3 blast furnace of Jones & Laughlin Steel Corp.'s Aliquippa Works has come in for a well-earned rest. It was recently blown out preparatory to relining. Before that No. 3 had operated almost continu-

ously for 14 years, 11 months. During this stint it produced 5,823,951 net tons of iron. J. & L. says this is a record run for a blast furnace without relining. The furnace was first blown in in 1933.

amount needed to pay off last year's contractual agreements. Most of the remaining \$225-million cash will be spent outside the U. S., through standard procurement contracts, or through "agreements" with Marshall planners.

• **Subsidy Plan**—Here's how the hefty contract authority could help, rather than hinder, American shoppers in the domestic markets:

**Stockpilers plan to use some of the \$300-million contract-authority to "subsidize" marginal metal and mineral producers in this country—and abroad.** This would bring the stockpilers materials which otherwise would not have seen the light of day. Result: There would be less of a drain on the domestic and world markets, and even some increase in side-products, not on the strategic lists, that industry needs.

• **Aid to Producers**—Clearly such a plan—which military men have shied away from until now—would do more than benefit the domestic consumer. As a basis for a long-range stockpiling program, it calls on domestic marginal industry as the source for many important metal and mineral commodities. It will keep important segments of the mineral economy—for example, the Tri-State lead-zinc producers (in Missouri, Oklahoma, and Kansas)—going for some time by promising them a customer at higher-than-market prices.

The marginal mining industry especially will welcome the subsidy idea right now. That's because Congress voted down legislation along these lines during the last days of the recent session. And last year the President vetoed continuation of the wartime premium-price plan for copper, lead, and zinc.

Many marginal producers, during the past subsidy-less year, gambled that the 80th Congress would pass a subsidy measure; they stayed in operation at a loss while waiting. Now, with a loss on the books, marginal miners face a close-down unless they get more money for their product. So they are pricking up their ears at word of the military's still-unannounced plan.

• **Pooh-Pooh**—The part the Marshall Plan will play in providing strategic and critical materials for the stockpile is "pooh-poohed" by minerals economists in Washington. They point out: Any country having materials that the stockpile—and private industry—badly need knows it can get dollars for such materials; it won't fool around with ECA red tape in selling the stuff.

So foreign buying by the stockpilers will interfere to some extent with private imports of strategies into this country. It's this interference that the stockpilers' subsidy aid to foreign producers would offset—over the long term. This help would take the form of money advances for expansion of facilities such as railroad cars, ore-treatment plants, power.



**SAVIORS**—Sen. Clyde M. Reed (left) and Rep. Alfred L. Bulwinkle—sponsored legislation to free the railroads from antitrust troubles as . . .

## Bulwinkle Law Balks Justice Dept.

**Rate bureaus are allowed to continue to set freight rates—thus crippling several drives to breakup joint rate-making.**

The Justice Dept.'s antitrust fight against the railroads has turned into shadow boxing. The Reed-Bulwinkle law—which Congress jammed through over President Truman's veto last week—takes all the real punch out of it.

• **Two Cases**—At the moment, two railroad antitrust cases are hanging fire in the courts. One is the Justice Dept.'s case in the federal district court at Lincoln, Neb. It charges a group of western roads and the Assn. of American Railroads with various kinds of discrimination against western shippers. The other is the state of Georgia's case before the Supreme Court. It accuses a group of eastern roads of rate discrimination against the South.

Strictly speaking, the Bulwinkle law does not interfere with either of these cases. All it does is let the roads continue their longtime system of making freight rates through rate bureaus and conferences—subject to Interstate Commerce Commission supervision, of course.

• **Justice's Position**—But by giving specific approval to the rate bureaus, the Bulwinkle law cuts the heart out of the Justice Dept.'s plan. For what the antitrust attorneys want to do is upset the whole bureau-and-conference method of rate making. Their goal is to force each road to set its rates independently, without talking it over with other carriers.

The Justice Dept. is not sure yet what it will do about the Lincoln case. The overriding of the veto took Justice by surprise. It has not had time to figure out just what the new law means. It will wait until ICC issues its interpretation.

Then it probably will go ahead with the specific charges of discrimination before the court at Lincoln.

The Georgia case is now in the hands of a special master. Theoretically, the Supreme Court might use this case to limit the application of the Bulwinkle law as much as possible. But one of the main things that Georgia asked was an injunction against the rate bureaus. And that, of course, is ruled out by the new law.

• **ICC's Job**—ICC will have to set up some new machinery to handle its responsibilities under the Bulwinkle law. It is charged with supervising the rate bureaus and prescribing the kind of action they can take.

Actually, final passage of the law is almost as much of a relief for ICC as for the railroads. The Interstate Commerce Commission's whole philosophy of regulation is built around the idea of joint action and regulated monopoly.

• **Unemployment Tax Cut**—Another piece of legislation that was hustled through in the closing days of Congress will also help the railroads. This is a law cutting the payroll tax on the carriers for unemployment insurance from a flat levy of 3% to 1% a year as long as the surplus reserve fund is above \$450-million. Experts figure that this will save the roads \$100-million annually for at least several years.

Right now, the unemployment insurance fund has a balance of about \$914-million. Annual payments out of it have been running around \$65-million, while the roads have been paying in about \$145-million.



# Antifreeze Battle

**Makers getting set for stiff competition among various types. Publicker is ambitious. Price is key.**

In this first week of summer the antifreeze makers are thinking about next winter. They're getting set to battle for the job of keeping your auto radiator from freezing up.

• **Types**—The three most popular kinds of antifreeze are liquids that have:

(1) An ethylene glycol base, lasting all winter;

(2) An ethyl alcohol (ethanol) base, which is cheaper than ethylene glycol but which gradually boils away through the winter;

(3) A methyl alcohol (methanol) base, cheaper than ethanol and also of the boil-away type.

• **Challenger**—Publicker Industries, Inc., big alcohol distiller (BW—May 15'48, p49), is out to increase its share of the antifreeze market. Last winter about 80-million gal. of antifreeze were sold in the U. S. Publicker says that 18% of this was its ethanol product, Thermo-Royal.

Publicker hopes to woo away some of the buyers of higher-priced, permanent antifreeze. It has told dealers it intends to hold the line on its retail price, \$1.75 a gallon.

But the makers of permanent antifreeze, which sells for around \$3.25-\$3.50 a gallon, say they aren't worried. They don't even expect to be able to keep up with next winter's demand.

Permanent products like Carbide & Carbon Chemicals Corp.'s Prestone and E. I. du Pont de Nemours & Co.'s Zerex accounted for about 25% of the antifreeze bought by the U. S. public last year.

• **Price Advantage**—Publicker also has a battle to fight with the makers of the cheapest antifreezes—those with a methanol base. They retail at around \$1.20-\$1.35 a gal.

Methanol is a chemical-industry by-product. It's pretty certain that methanol won't get up into the ethanol price range.

Ethanol's price is tied up with the price of molasses, from which it is extracted. Of course, Cuba's huge crop of sugar this year (estimated output of blackstrap molasses is 340-million gal. against 300-million last year) raises the possibility of a price drop.

• **More Likely Later**—But the trade doesn't think there is much chance of a real drop soon. Sugar-and-molasses men think molasses will hold at about 28¢ a gal.—or that it might work down to 25¢—this year.

They say that most of this year's Cuban blackstrap is already spoken for. And they feel the Cuban Sugar Institute, the sole seller, can keep the price up temporarily.

Next year is another matter. Some of these experts in sweets think that competition from other producers then will drive the price of Cuban molasses down as low as 15¢ a gal. That would help Publicker. But it would be too late to affect the price of its antifreeze this coming winter.

## GOODRICH USES COLD TYPE

Industry has found a use for the "cold type" method of newspaper production which came out of the prolonged Chicago typographers' strike (BW—Mar. 13

'48, p23). This is the method which teams up the "justifying" typewriter with photoengraving. Copy is typed in columns that "line up" on both sides; then it is pasted on page layouts, which are photoengraved to get a printing plate.

B. F. Goodrich Co. has adopted the new system for the Akron plant's weekly newspaper. The company switched over because its printing plant was too jammed with Goodrich price lists and other material to handle the tabloid-size publication (circulation 22,000).

Now the company has the paper set by Vari-Type machines. Zinc engravings of the pages are made in a commercial plant, printing is done on company presses. Goodrich claims it has saved some money by using the new system.



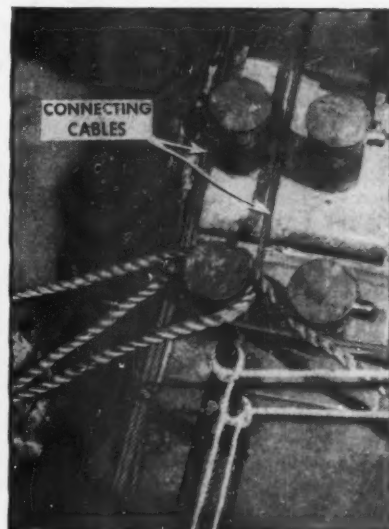
INTEGRATED TOW, longer than the Queen Mary, will navigate the Mississippi

## New Tow Cuts Costs and Time for River Freight

Mississippi River transportation rounded a new bend last week with the trial run of a new high-speed, integrated tow.

Built for the Federal Barge Lines of St. Louis, the tow is 1,200 feet long, has reached a speed of 17 knots down-river. The secret: 11 barges are built to lock snugly together forming one, long, streamlined vessel, greatly reducing water drag. Bargemen expect the new tow will make the upstream trip from New Orleans to St. Louis in just over one week; ordinary tows make the trip in 12 to 19 days.

Federal Barge Line says that the increased speed and efficiency of the new tow should cut freight costs on the river by 50%.



HEAVY CABLE locks sections together



# Avery Holds the Fort

But he's holding it pretty much alone as more executives and directors of Montgomery Ward quit. Worst threat now is special stockholders' meeting; he has a good chance to weather even that.

A month ago it looked as if the impossible had happened: A successful rebellion in executive ranks against Montgomery Ward's chairman Sewell L. Avery (BW-May 29 '48, p92).

Then the 74-year-old Avery reached for his pistols. Single-handed he recaptured the fort. This week he was still firmly in it while casualties among the rebels kept mounting. Strawn across the battlefield, or retired from the fight, were five of Ward's 15 directors and five top operating men. More seemed sure to go. In Chicago the trade was wondering: Will the battle go on until Avery has to operate the nation's second biggest mail-order house all by himself?

The 74-year-old Avery has frequently said that he would like to relinquish direct control of Ward's when he found an able administrator to take over. But few who know him expect he will quit under fire—if he can help it.

• **Tide of Battle**—These are the highlights of the latest skirmishes:

(1) Two "Morgan" directors, George Whitney and Harry P. Davison, have resigned from the company. Neither attended the explosive board meeting that Avery had called on June 10. There he had insisted on the resignation of Wilbur H. Norton, president and a director of the mail-order company (BW-Jun. 19 '48, p98).

The board reversed its earlier compromise settlement of the long-smoldering management dispute, which was generally interpreted as giving Norton increased authority over day-to-day operations of the company. Whitney and Davison, in guarded statements, implied that they had not been fully advised of the purpose of the special meeting; and they disagreed with Avery's handling of the internal conflict.

(2) Two more operating vice-presidents quit—Laurence H. Odell, general merchandise manager; Earl G. Ward, controller and a director, a 20-year veteran at Ward's. These resignations followed the earlier exodus of Norton; Lawrence A. Appley, vice-president and a director; and Oswald B. Higgins, vice-president and general operating manager.

And there may be another before long: According to report, Charles M. Odorizzi, vice-president in charge of mail-order operations, is also thinking about quitting.

(3) Montgomery Ward stock, long regarded as a "blue chip," particularly by investment trusts, has slumped about

6 points from its year's high of 65 on June 9.

(4) Representatives of Massachusetts Investors Trust, holder of 104,000 shares—the largest single block of Ward stock—at midweek were conferring to great length with Avery and other directors in Chicago.

• **Stormy History**—The current shakeup is the third for Ward's since Avery took over 17 years ago. Avery got his job through the backing of the Morgan interests. Born to wealth, Avery made his business reputation as president of U. S. Gypsum Co. at the age of 30. (He is now chairman of that company, a director of U. S. Steel and several other corporations.)

His assignment at Ward's in 1931 was to put the mail-order house on its feet. He did—with sweeping gestures. He wrote off surpluses, hired new and promising young executives, introduced quality goods in Ward's line.

But in the successful years since, no less than three presidents and 19 vice-presidents have joined the famous "Ward alumni association." Each time Avery has replaced them with younger men promoted from the ranks and trained in Avery's methods. The graduating class this time has held top management jobs—in most cases—for about two years.

• **Personalities and Policies**—Main cause of the latest eruption was a clash of personalities and ambitions. Charges of personal disloyalty have flown among both Avery's friends and critics. But the basic dispute centered on distribution of executive authority—and Avery's iron determination to keep his finger on every detail of the company's operations.

Part of the younger officers' dissatisfaction has also stemmed from Avery's ultraconservative financial policies since the war's end.

These have been in sharp contrast to the aggressive expansion policy of its bigger competitor, Sears, Roebuck & Co. (BW-Apr. 3 '48, p66). Avery has felt the present is no time for expansion, with both costs and volume at new peaks. While Sears since 1945 has ploughed back \$130-million of its record earnings into capital expansions—including new and enlarged retail stores—Montgomery Ward has added no new stores, has spent a minimum on capital improvements.

• **Caution**—Instead Avery has preferred to: (1) build up working capital and a

reserve against future inventory losses in anticipation of profit and sales declines, and (2) show favorable earnings and dividends.

The result has been that while Montgomery Ward's sales last year rose 18.9% over 1946, the increase lagged behind Sears Roebuck & Co.'s 23% increase. Total Ward sales of more than \$1.1-billion were little better than half Sears' nearly \$2.6-billion; Ward earnings of \$59-million compared with Sears' \$107-million.

Ward's working capital of \$366-million exceeds Sears' \$330-million. With inventories at the end of the fiscal year of \$277-million, Montgomery Ward carried a \$26-million reserve for inventory declines.

• **Avery's Chances**—Up to the present, Avery's policies (and control) at Ward's face no open threat as a result of the upheaval. At least until the annual stockholders' meeting next April, the chance of a direct challenge to his position is slim—unless indirect pressure from big investment interests forces him to act.

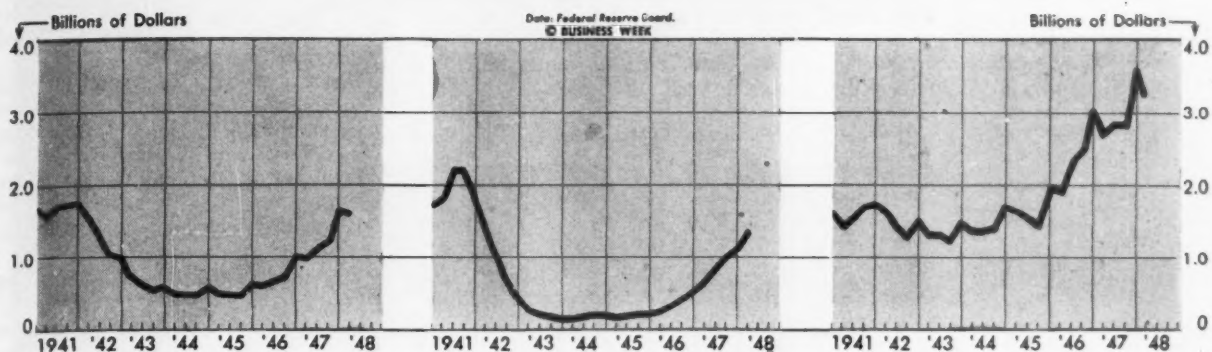
As long as the remaining members of his board of directors stick firmly behind him, dissatisfied stockholders would have the admittedly difficult job of rounding up 20% of the 6.7-million voting shares outstanding to force the call of a special meeting. Even then, Avery's majority on the 15-man board would remain unshaken if his directors continue to back him up; such a special meeting could legally do no more than fill the five vacancies left by the recent resignations.

You can't tell, either, whether withdrawal of the "Morgan" directors foreshadows a proxy battle to unseat Avery next spring. Ownership of Ward's stock is widely scattered among about 65,000 individual holders. And stockholders are notoriously reluctant to rock the boat when earnings are rolling in at a record rate. Of course, if eastern investment holders join forces through Morgan leadership, such a battle might possibly be forthcoming.

• **Replacements**—But Avery may emerge unscathed if, in the next few months, he: (1) can solve the problem of filling the holes in his operating organization left by the wholesale resignations; and (2) keep the company books well in the black.

His biggest job will be to find men, either inside or outside the company, to take over the vacancies. Many observers close to the company's affairs doubt if any executives of sufficient experience are left in the organization; and they think it is unlikely that any really top-flight outsiders can be hired after the current storm. The guess is that Avery will draft some top official from U. S. Gypsum to take over the Ward presidency.

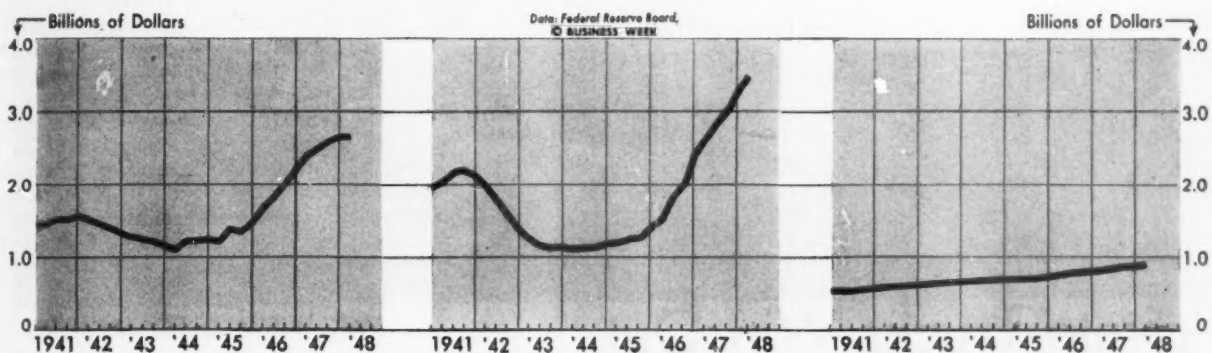
# Volume of Consumer Credit Is Rising . . .



(1) In Instalment Sale Debt (except autos)

(2) In Automobile Instalment Debt

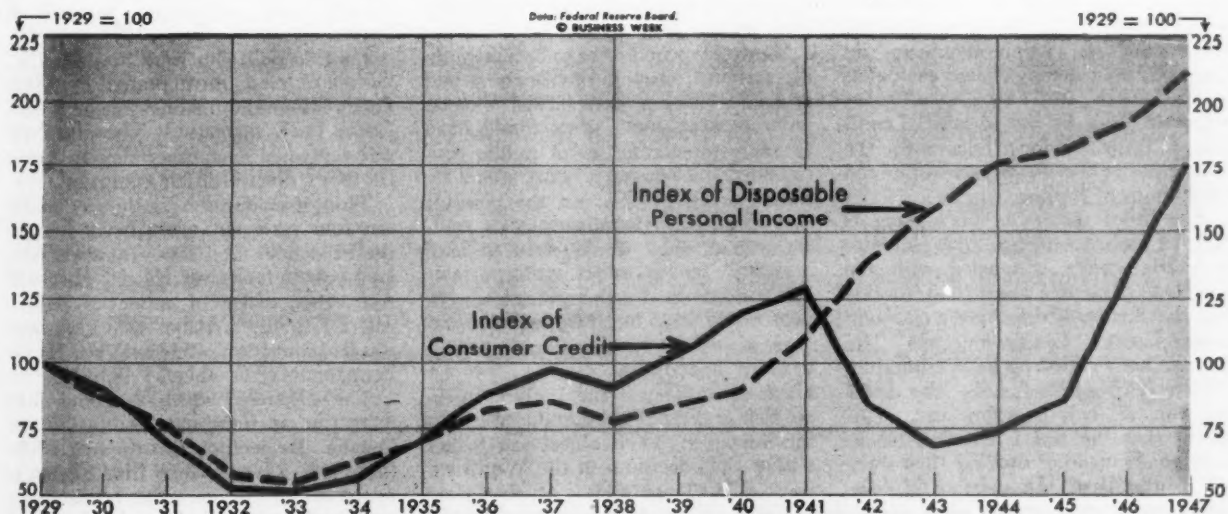
(3) In Charge Accounts



(4) In Single-Payment Cash Loans

(5) In Instalment Cash Loans

(6) In Miscellaneous Debt



(7) But It Still Hasn't Caught Up with the Growth of Consumer Income

## What's Happening to the Cost of Living

If the May 15 level of the cost of living stays constant until July 15, General Motors employees will get a 1¢ an hour wage boost in September. That is what the May jump of 1.2 points in the

index—reported this week by the Bureau of Labor Statistics—means to many employers who are wondering how the G.M. contract (BW—May 29'48, p96) is going to work out.

	Food	Clothing	Rent	Gas & Electricity	Other Fuels & Ice	House Furnishings	Misc.	Total Cost of Living
August, 1939 .....	93.5	100.3	104.3	99.0	96.3	100.6	100.0	98.6
January, 1941* .....	97.8	100.7	105.0	97.4	104.2	101.1	101.9	100.8
May, 1941 .....	102.1	102.8	105.7	97.2	105.0	103.2	102.5	102.9
May, 1942 .....	121.6	126.2	109.9	96.6	112.9	122.2	110.9	116.0
May, 1943 .....	143.0	127.9	108.0	96.1	118.7	125.1	115.3	125.1
May, 1944 .....	135.5	137.4	108.1	95.9	123.3	135.0	121.3	125.1
May, 1945 .....	138.8	144.6	108.3	95.2	124.4	145.4	123.9	128.1
May, 1946 .....	142.6	155.7	108.4	92.2	127.8	153.7	127.2	131.7
May, 1947 .....	187.6	185.0	109.2	92.4	142.4	181.9	139.0	156.0
June .....	190.5	185.7	109.2	91.7	143.0	182.6	139.1	157.1
July .....	193.1	184.7	110.0	91.7	146.6	184.3	139.5	158.4
August .....	196.5	185.9	111.2	92.0	154.8	184.2	139.8	160.3
September .....	203.5	187.6	113.6	92.1	156.3	187.5	140.8	163.8
October .....	201.6	189.0	114.9	92.2	157.4	187.8	141.8	163.8
November .....	202.7	190.2	115.2	92.5	160.5	188.9	143.0	164.9
December .....	206.9	191.2	115.4	92.6	162.0	191.4	144.4	167.0
January, 1948 .....	209.7	192.1	115.9	93.1	165.0	192.3	146.4	168.8
February .....	204.7	195.1	116.0	93.2	165.9	193.0	146.4	167.5
March .....	202.3	196.3	116.3	93.8	166.0	194.9	146.2	166.9
April .....	207.9	196.4	116.3	93.9	166.7	194.7	147.8	169.3
May .....	210.9	197.5	116.5	94.1	168.6	193.6	147.5	170.5

\* Base month NWLB's "Little Steel" formula. Data: U. S. Bureau of Labor Statistics; 1935-39=100.

cial business use. It was the "principal business use" that the for-hire group was especially anxious to wipe out.

• **Economic Effects**—ICC's refusal to reverse the *Woitishek* decision heartened more than one industry.

Textiles are a good example. That business has rapidly been developing its own rounded interstate trucking operations. The trend has grown as the industry has moved southward. Many concerns now use their own trucks to carry cloth from the South to northern finishers and markets.

• **Spreading Use**—Partly due to rising freight rates (BW—May 15'48, p19), scores of other industries are also turning to their own trucks for long hauls. Thus: • The auto industry is using its own trucks to haul sub-assemblies from one plant to another.

• The petroleum industry still depends on ships and rail for hauling the bulk of its products, but uses some 150,000 trucks of its own as well.

• Telephone companies use about 20,000 trucks; dairies, 120,000; meat packers, 100,000; brewers, 75,000; soft drink bottlers, 45,000. Not all of these are used on interstate runs, but the size of the figures is an index of the importance of trucks.

The Lenoir decision, of course, affects only hauls across state borders. Shipments in intrastate commerce are subject to a state's own statutes and its interpretation of them.

## Private Trucks Win Out

ICC rules vehicles carrying owners' goods across state lines are not common carriers. Decision favors furniture, textile, and other industries relying on own transportation.

The Interstate Commerce Commission last week bailed out businessmen who do their own trucking across state lines. They aren't common carriers, said the ICC, even if they charge customers for deliveries.

• **Lenoir Case**—In the so-called Lenoir case, ICC nailed down once again the distinction between a private carrier and a common, or for-hire, carrier.

The Lenoir Chair Co. was hauling its North Carolina furniture to a customer in Florida when it tangled with the Florida Commerce Commission. Florida said that Lenoir had to have a common carrier license. Lenoir objected. The ruckus finally ended up in Washington.

Here ICC upheld Lenoir. The dividing line, it said, is prime use. This means that the test is whether trucks carry goods made or used by their owners' plants. If so, the question of compensation is secondary.

• **What It Means**—Had ICC ruled otherwise, it would have dealt industry

a blow. It would virtually have knocked out private trucks on long hauls across state borders.

If private carriers were to become public carriers, most businessmen would probably give up their fleets. For in order to keep them, they would have to apply for certificates of public convenience and necessity; many would be turned down by ICC on the grounds that adequate service already exists. And, if certified, they would have to haul everyone's goods under uniform rates and conditions. Furthermore, businessmen would have to go through the red tape of separately incorporating their trucking operations.

• **Precedent**—It was the for-hire truckers that really put the Lenoir case into the limelight. Their object was to get a prior ICC decision—in the *Woitishek* case of 1943—set aside. At that time ICC set up two tests to determine the difference between for-hire and private carriers: (1) compensation; and (2) prin-

## TWO NEW OLEO MAKERS

Congress didn't kill the federal taxes on oleomargarine. Nevertheless, two major companies have entered the margarine field. Lever Bros. this week got into the business by purchasing one of the pioneer manufacturers of the bread spread. And one of the country's big creamery concerns had decided to do a straddle—make margarine, as well as butter.

Lever bought the John F. Jelke Co., Chicago. Jelke, incorporated in 1889, does a \$25-million annual business with Good Luck margarine. The purchase was explained as another step in Lever Brother's diversification campaign.

This diversification really got under way four years ago, when Lever bought the Pepsodent Co. (BW—Jul. 8'44, p58). Last year it took over Harriet Hubbard Ayer, Inc., maker of cosmetics (BW—Aug. 2'47, p76). A major deal this year was its acquisition of Hedy Wave Home Permanents (BW—May 15'48, p44).

The creamery which is going into margarine is Fairmont Foods Co. of Omaha. Its decision was reached while there still was a chance that Congress might act on the margarine tax and was explained to stockholders by Leonard E. Hurtz, president, thus:

"If you can't beat 'em, join 'em."





## Time for a Breather

Perhaps you have forgotten such things, Mr. P. A., but isn't it time you gave some special attention to your rod and reel, your garden and your golf game. Yes, the vacation season is well under way, and if you're going to wander in the wide open spaces—better begin thinking about it.

We know you are having a tough time. Steel buying, like steel supplying, is no easy task these days. But a little rest now will pay off in new energy and a new outlook on your return.

While you're away, please know that we'll be doing everything we can to give your company prompt service on steel. With demand so heavy there may be times when we cannot meet all requirements. But you can be sure your associates will receive all possible cooperation from the nearby Ryerson plant, as you would yourself.

So break away soon for that grand and glorious vacation. You owe it to yourself, your family and your company. Joseph T. Ryerson & Son, Inc.

# RYERSON STEEL

# 47 KEYS to the world's richest market

From Adams to Wilson... in 47 cities and towns in New York State... there are Marine Midland banks. Their officers are next-door neighbors to many of your business problems. Enlist them to serve as your eyes and ears in the "World's Richest Market" by calling on the Marine Midland Trust Company of New York when you need quick, accurate business information on New York State.

## Marine Midland Banks serve...

Buffalo	Jamestown
New York City	Johnson City
Adams	Lackawanna
Albion	Lockport
Alexandria Bay	Malone
Antwerp	Medina
Attica	Middleport
Avon	Niagara Falls
Batavia	North Tonawanda
Binghamton	Nyack
Copenhagen	Oswego
Corinth	Palmyra
Cortland	Phoenix
Depew	Rochester
East Aurora	Snyder
East Rochester	Sodus
Elmira	Tonawanda
Elmira Heights	Troy
Endicott	Watertown
Evans Mills	Watkins Glen
Fulton	Webster
Holley	Westfield
Horseheads	Williamsville
	Wilson

**The  
MARINE MIDLAND  
TRUST COMPANY  
of New York**

*120 Broadway*

Member Federal Deposit Insurance Corporation

## CITIES



HANDSHAKE by realtor Epstein (left) and TVA auctioneer clinches deal as . . .

## Syndicate Gets Norris, Tenn.

Model TVA town knocked down to group of Philadelphia businessmen, who vow they'll keep it that way.

Henry David Epstein, 27-year-old Philadelphia realtor, awoke one morning last week to find himself in a singular spot: The day before, as representative of a syndicate of Philadelphia businessmen, he had been the top bidder at the government's auction sale of Norris, Tenn.

The town, pride of the Tennessee Valley Authority, had long been a bone of contention between pro- and anti-New Dealers (BW-Mar.13'48,p56). It was put on the block early in the spring. Townspeople themselves had hoped to buy the city, and had formed a corporation to bid. But on auction day, the corporation spokesman's top bid was \$1,900,000. Epstein's clinching offer was \$2,105,000.

Since this was a good bit over the government's minimum acceptable price of \$1,849,750, townspeople wondered out loud what would happen to them. Epstein was quick to reassure them. He said that all would have a chance to buy the 342 houses at "fair prices." He said that the syndicate intends to incorporate the town and keep it a "model American community." Original construction cost of the city ran to \$3.7-million.

As to the identity of his colleagues in the deal, Epstein has remained clam-mouthed. The group's down payment on the deal came to but \$50,000. The

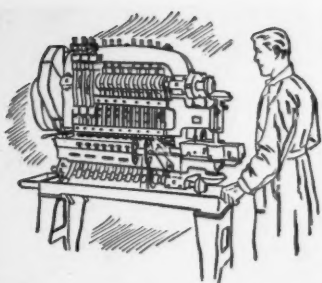
balance will be paid the day that the Tennessee Valley Authority gives title—tentatively set for Aug. 31.

## GYPSUM DEAL OUT

National Gypsum Co.'s operation has called off its plans—at least temporarily—for further expansion in Baltimore. The second contract between the city and the Buffalo company has been canceled—by mutual consent. Had it gone through, Baltimore's Port Development Commission would have put up some \$2.5-million for a National Gypsum paper mill, near its new plaster plant.

Behind the cancellation was a brisk competitive squabble. Baltimore had already financed a pier for National Gypsum. But the city's plan to help with the paper mill got U. S. Gypsum Co.'s dander up. It challenged the right of the commission to finance this kind of deal (BW-Apr.10'48,p35). The case was headed for the courts until the project collapsed of its own weight.

Both National and city officials sighed with relief. And National Gypsum officials have decided they don't want to build now anyhow—not with construction costs so high (estimates on the proposed mill were \$5-million, now are \$8-million). But the Baltimore plaster plant won't be hurt; it will get its paper from other factories.



# Get that Old **BRASS MAGIC** in Design and Production...

BRASS is pure "believe-it-or-not" . . . the way it rolls out of automatic machines in lipstick cases and other cosmetic containers . . . with scarcely a reject in a carload.

For Brass is workable to a point where it gives new freedom to product and tool designers. It cuts corners in machining . . . often settles for one operation where other metals demand many. It stands higher machining speeds. And wherever it's used, it cuts production costs. *What more could you ask?* Well, no matter what, chances are that Brass could do it!



## ... and Get New Merchandising Magic at the Point of Sale

The word for Brass is "richness" . . . in color, weight, and feel. Encasing any product . . . or as a product in itself . . . Brass quietly says "Quality" in a tone no buyer can mistake. Its golden-yellow glow gives a busy golden ring to the cash register . . . and leaves an interesting profit for all concerned. Now . . . what can Brass do to build *your* business? Bristol will tell

you frankly *if and how*. Just get in touch with the Sales Engineering Director, here at the Bristol mills.

### THE BRISTOL BRASS CORPORATION

*Makers of Brass since 1850, Bristol, Connecticut*

15 Park Row, New York City    438 Oliver Building, Pittsburgh, Pa.  
1607 South Broadway, Dayton, O.    616 Temple Bldg., Rochester, N. Y.  
827 Hospital Trust Building, Providence, R. I.

*Build Business with* **BRISTOL BRASS**



# Warning!

It's time for new eyes in your production line—  
to make the work come through right the first time—  
to let your workers see what they're making—  
to adjust machines before they produce scrap.



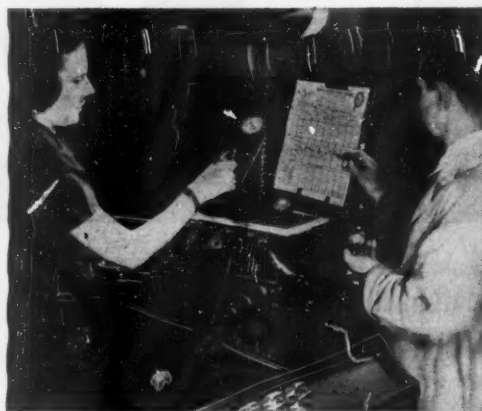
Dial Indicator Gages tell the mechanic what he wants to know. They show him whether the part is too large or too small; they also show him *exactly how much* the workpiece is off standard. He gets an accurate reading at a glance; he saves time; he no longer relies on the sense of "feel."

Furthermore, and most important, the Dial Indicator tells the operator exactly how much the work is tending toward the high or low limit. Hence, he knows how much or how far to readjust the setting of the machine.

When control limits are set up on a Dial Indicator, the machine's tendency to exceed these limits is quickly spotted; the machine is adjusted *before* the scrap is produced.

The continued use of Quality Control methods leads to sensible standardizations in product, specifications, machine methods and materials . . . Let us give you case histories.

Dial Indicators can be applied to the gaging of any linear dimension. We make both regular and custom-built gages to meet the needs of users in hundreds of industries. For highly specialized needs, we also make Air Gages and Automatic Electronic Sorting Gages. Let us help you with any problem of gaging and inspection. If you will send us blueprints of work to be measured, we will gladly recommend the proper gage. No obligation is involved.



## FEDERAL

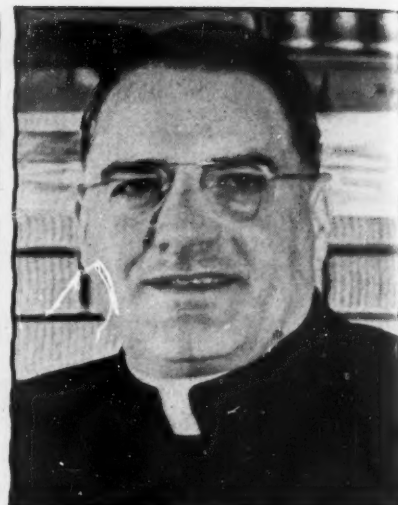
FEDERAL PRODUCTS CORP.  
1144 Eddy St., Providence 1, R. I.



YOUR PROFIT DECISION IS *Visible* PRECISION

\* The use of Dial Indicator Gages—visible precision—lowers inspection costs, raises production. Federal Products Corporation is America's largest maker of both regular and custom-built gages—mechanical, air, electronic—for the measurement of single and multiple dimensions.

Represented in Canada by Rudel Machinery Company, Ltd.



PARISH PRIEST J. Stanly Ormsby has become one-man chamber of commerce

## Job Finder

LeRoy, N. Y., lost 75 jobs when a plant folded. So group led by a local priest got a clothing maker to set up a plant there.

When a major industry in a small town folds up, that's bad news for the town. That's what happened, early last year, to LeRoy, N. Y. But LeRoy did something about it.

• **75 Jobs Lost**—LeRoy is 28 mi. from Rochester, 48 mi. from Buffalo; its population is about 4,500. Associated Seed Growers, of New Haven, Conn., employed about 75 women there, sorting beans by hand. Then Associated developed a machine that could sort the beans faster and cheaper than hand labor. After this improvement Associated closed down its LeRoy plant and moved away.

Almost all of the 75 dismissed women were members of St. Joseph's Roman Catholic church. Knowing that their families had depended heavily on their wages, the parish priest, the Rev. J. Stanly Ormsby, set to work to find them a new source of income.

• **New Industry Wanted**—In June, 1947, Father Ormsby called a meeting of his flock and told his idea—to get a new industry to move to LeRoy. For bait, they decided it would be necessary to buy or build a factory. Within a month, \$14,000 had been collected. Most of this amount came from the families of the women who had lost their jobs.

John Smith, area representative of the New York State Commerce Dept., suggested the names of several companies that might be interested, and the

*Why \$17.00*

**TOCCO  
Braze in  
15 seconds**

**when you can do it  
for 46¢?**



15 K. W. TOCCO unit brazing tools.

## with TOCCO\* Induction Heating

A large midwestern manufacturer of automotive parts reports the following savings from salvaging high-speed lathe tools with TOCCO induction heating:

"The large tool shown here costs \$17.00. It is eight inches long but formerly was discarded after four inches had been used. Now we use it all; the four inch stub is TOCCO-brazed to a four inch shank and we have a new tool for the cost of grinding

and brazing—46¢, of which only 6¢ is the cost of TOCCO-brazing.

"This process, applied to the many high-speed tools we use, provides a monthly savings of \$2,000. The TOCCO Machine paid for itself completely in less than two months."

TOCCO Engineers stand ready to analyze your soldering, brazing or heat-treating problems to produce similar cost-cutting results.

THE OHIO CRANKSHAFT COMPANY



# TOCCO

**FREE  
BULLETIN**

Mail Coupon Today

THE OHIO CRANKSHAFT CO.  
Dept. W-8, Cleveland 1, Ohio  
Please send copy of "Tool Tipping  
with TOCCO".

Name \_\_\_\_\_  
Position \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

# LOCK-TYPE CARTONS AT LOW COST

## WITH General Mills Tray-Lock Machine

A DEVELOPMENT OF  
FRANK D. PALMER, INC.

Here is General Mills' latest achievement in cost-cutting packaging machinery. The Tray-Lock Machine produces lock-type trays and cartons from flat, unglued blanks. Operation of the machine is entirely automatic; the expensive glueing operation is eliminated completely.

The machine delivers a wide variety of tray and carton sizes and styles to the filling station at speeds to synchronize with the filling operation, up to 90 units per minute. All are turned out with sturdy, straight sides that have no diagonal scores to weaken them.

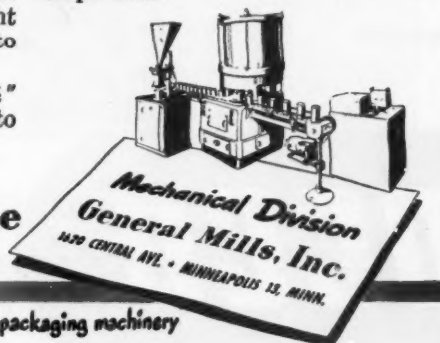
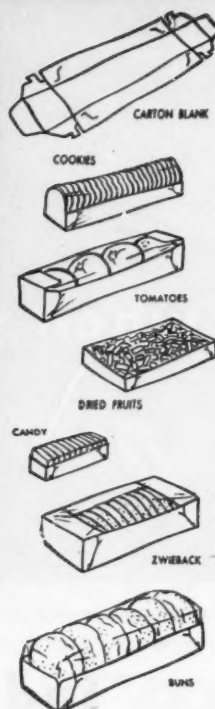
Carton sizes range from 1" to 1½" in height, 2" to 6" in width and 4" to

13" in length. Change-over from one carton size to another is a simple 10-minute job.

Cut your packaging costs—turn out stronger cartons at a faster rate with the General Mills Tray-Lock Machine. Further information on this or other General Mills packaging machines (finished-edge carton formers, ice cream carton set-up and closing machines, Vacuflow powder fillers) is yours for the asking. Address Dept. B68.

## General Mills Tray-Lock Machine

Made by one of the world's largest users of packaging machinery



priest wrote them all letters, telling of LeRoy's plight.

• **New Industry Found**—The idea clicked. Hickey-Freeman Co., manufacturer of men's clothing, was plagued by a labor shortage in Rochester, its home city. It had already set up small branch plants in several nearby towns. So it jumped at the chance to get into a town with an assured supply of workers.

An unused building was found that was suitable for conversion into a factory. The company paid all expenses, so the \$14,000 was returned to contributors. While remodeling was going on, Hickey-Freeman moved sewing machines into a church basement so the women could start work at once.

The enterprise now employs 45 women. And Father Ormsby is already engaged on another, similar project. Because of the shortage of work opportunities in LeRoy, some of its men commute as far away as Buffalo. A group of these men has decided to collect money, just as the women did, to build a new plant. They hope to attract an employer who would offer some sort of mechanical work.

## San Francisco Becomes Free Port No. 3

San Francisco has won its 2-year battle for a foreign trade zone. Twenty tons of scrap copper and bronze from the Philippines and 1,000 cases of rum from Great Britain were landed on Pier 45 without payment of duty. The scrap was headed for Britain, the rum for Japan.

The token shipments inaugurated a service that until now only two U. S. seaports could provide. The Commerce Dept.'s Foreign-Trade Zones Board gave New York a foreign trade zone in 1937, New Orleans in 1946 (BW—Jul. 6 '46, p34). The (California) Board of State Harbor Commissioners holds the charter for Zone No. 3.

Essentially, maritime traders view a foreign trade zone as a traffic builder. Exporters abroad may drop their cargo in the fenced and customs-guarded area, break it up for transshipment, assemble it in carlots, store it until prices improve, do some limited processing. They don't have to pay duty while their cargo is in the zone.

San Francisco's port needs a shot in the arm. Tonnage through all Pacific Coast ports last year was 25% under 1939, and San Francisco for the first time fell behind Washington and Oregon ports in total tonnage (BW—Feb. 21 '48, p49). Civic enthusiasm for the new zone runs high. But customs brokers and shippers think it will take a couple of years of plugging before it can pay its own way.



# Here's Help

to make your basic problems shrink  
... and profits grow



For each of four principal problems of management — *property, production, transportation* and *sales* — there are Sonneborn products to help make those problems shrink ... and your profits grow.

Whether your problem of the moment is to "weather-protect" or "wear-protect" a building, to manufacture an ointment, cold cream or insecticide, to lubricate a fleet of trucks, or produce a better blan-

ket ... you can benefit from the extra values Sonneborn builds into its highly refined oils and chemicals.

Below are four typical free catalogs and bulletins which bring you news of recent Sonneborn developments and will help you put Sonneborn products to work to: protect and preserve property • improve processing and production • lower costs of transportation • or increase customer demand and preference.

## SONNEBORN

... Oil Refiners and Manufacturing Chemists

*Serving Four Basic Management Problems*

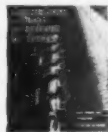
PROPERTY • PRODUCTION • TRANSPORTATION • SALES

CHECK LITERATURE YOU WANT AND MAIL COUPON NOW

BUILDING  
PRODUCTS  
DIVISION



WHITE OIL and  
PETROLATUM  
DIVISION



AMALIE  
LUBRICANTS  
DIVISION



TEXTILE  
CHEMICALS  
DIVISION



**PROTECT AND PRESERVE PROPERTY** — Quick, easy, economical ways to construct and maintain floors, walls, ceilings, roofs, etc., with Sonneborn "Building Savers".

**IMPROVE PROCESSING AND PRODUCTION** — Specific properties of Sonneborn Refined Petroleum Products suitable for a wide range of product and processing applications.

**LOWER COSTS OF TRANSPORTATION** — The fundamentals of good lubrication for gas-line-driven fleets and Diesels: how AMALIE Motor Oils and Lubricants give more protection.

**INCREASE CUSTOMER DEMAND AND PREFERENCE** — How Fybrol 1115 (one of many Sonneborn products for textile processing) improves mill efficiency and woolen fabrics.

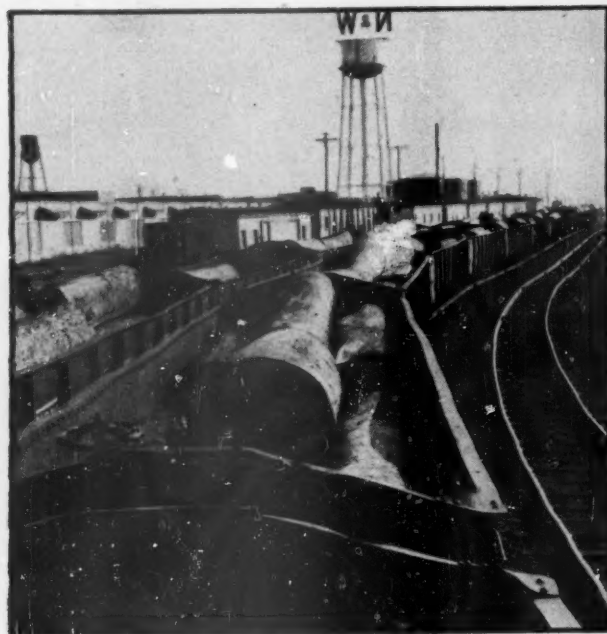
**L. SONNEBORN SONS, INC., Dept. BW1, New York 16, N. Y.**

NAME..... TITLE.....

COMPANY.....

ADDRESS..... ZONE..... STATE.....

# PRODUCTION



Mahogany logs, shaved into veneers, become . . .



Finished pieces at Grand Rapids Chair Co. as . . .

## Furniture Makers Mechanize to Beat Costs

Industry, beset by traditional thinking that ups costs, turns to modern production methods for relief.

An industry steeped in tradition can take a bad licking in a price spiral. The furniture industry is a good example. For "traditional" thinking governs design, slows down production, insists on outworn sales and distribution methods. Result: The industry is finding it hard to adjust fast to a changing economic situation in which material and labor costs are on the way up, and the consumer dollar is losing some of its stretch.

In the last few months supply has been catching up with demand. As a result, furniture makers know they won't be able to boost already-high prices any further. Nevertheless, costs—labor, materials, distribution—will keep on rising. So the basic problem facing the furniture makers is simply this: How can they cut costs without giving up quality? On the successful solution of that problem rests the fate of many small units in the industry.

• **Lots of Small Plants**—The furniture industry is one of the oldest in this country. It's a fair-sized business; factory sales are well over \$1.5-billion a year. Manufacture sprawls over 45 of the 48 states, with over 4,000 companies, most of which are small (1946-47 production averaged about \$325,000 per company).

That number includes many war-born, two-man or three-man firms organized to get on the OPA bandwagon and pick up fast profits. (Ceiling prices were set without regard to quality.)

Growth has always been haphazard. As a result, the industry has never presented a united technical and development front, and its attempts to cut costs and develop new techniques and forms have been limited.

But the laws of economics are slowly but surely changing that picture. The industry has finally put its engineers to work on costs.

• **Survey**—Business Week has just concluded a personal survey of the industry in high-quality, medium-quality, and mass-production furniture producing areas. That study, backed up by research into industry statistics, shows:

(1) Practically all plants, in all areas, are working on revising plant layout, adopting further mechanization, trying new production processes.

(2) Plants in the medium- and medium-high-quality areas are investigating new materials, finishes, and adhesives.

(3) Relatively few plants are spending any money on "long-term" research.

(4) Radical new designs are not being promoted to any great degree. Modi-

fied modern furniture, attractive as well as utilitarian and compact, is being sponsored by many makers.

(5) College programs are being financed by both northern and southern manufacturing associations. These programs are aimed at developing furniture technicians and executives for the future.

(6) Not much is being done, except in one or two instances, to improve the archaic and costly distribution methods now in use.

To be sure, most of these steps are long-range in their effects—and the cost problem is immediate. But manufacturers hope that their interim efforts on mechanizing will help ease that.

• **Another Problem**—Meanwhile, there are other bugs in the basement.

To get costs down, you need fairly long runs on a product. That's not easy in the furniture business. Tradition in selling is against it. In the early days, when hardwoods were plentiful in most areas, plants were set up all over the country, sold their products in the immediate vicinity. There was no incentive to seek wide distribution. So wholesaling and jobbing were just about unknown; plants stayed small—even when immediate lumber supplies dwindled.

• **Distribution Pattern**—Out of that situation grew the marketing habits of today. Manufacturers strive to produce

**IT'S LIGHTER! IT'S STRONGER!  
IT'S NON-CORROSIVE!  
IT'S RUST-PROOF!**



## **..IT'S A FRUEHAUF EXCLUSIVE!**

**B**UILT OF *Stainless Steel*, it is America's most modern Truck-Trailer.

Since 1940, Fruehauf has been the sole Trailer manufacturer using this amazing non-corrosive metal in building Trailers—Trailers which have set an all-time "low" in maintenance expense.

These gleaming units of Stainless Steel have demonstrated their earning power many ways. With strength  $2\frac{1}{2}$  times that of high-tensile steel, "Stainless" permits unique construction—a *lighter* vehicle that carries *bigger* loads. Its resistance to the elements means much longer life. No painting is

needed to retain its lustrous beauty. Its durability outlives any other metal. No Stainless Steel Fruehauf has ever been reported "worn out."

In these days of rising costs, here are two facts which should interest you: (1) if you use motor trucks, Trailers will drastically cut your haulage expense—as much as 60%; (2) of all Trailers, none can match the dollar-saving performance of Stainless Steel. Write today for the complete story.

*World's Largest Builders of Truck-Trailers*

### **FRUEHAUF TRAILER COMPANY**

DETROIT 32

LOS ANGELES 11

*In Canada: Weston, Ont.*

79 Factory Service Branches

#### **MOTOR TRANSPORT PAYS ITS WAY!**

- Only 1 in every 6 vehicles on the road is a truck
- Only 1 in every 5 miles traveled is by truck
- Yet 1 in every 3 highway tax dollars is paid by trucks



**FIRST IN TRUCK-TRAILER TRANSPORT!**



# "We're happier since the Twins arrived!"



## My Dictaphone Twin behaves beautifully!

Slow, tiring, "read-that-back" dictation went out the door the day voice-perfect Electronic Dictation stepped in.

My twin—the Electronic Dictating Ma-



chine—gets all dictation finished in record time. *It's said and done, now!*

This machine lets me relax while I dictate, too. The handy electronic mike never muffs a word, or a whisper. I can sit back and think out loud!

### The Dictaphone Twins

For an eye-opening, ear-opening demonstration, call your local Dictaphone Representative. Let him show you how the Twins can save you time and money. Or just mail the coupon below.

Dictaphone Corporation, Department F-7  
420 Lexington Avenue, New York 17, N. Y.

- ☐ Please send me descriptive literature.  
☐ Please demonstrate Twins in my office.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



## My Dictaphone Twin is letter perfect!

My Twin's electronic, too... it's the new Dictaphone Transcriber! It re-speaks every word with perfect tonal clarity. It means nonstop, letter-perfect typing.

There's every convenience for speed



and comfort. Dials to control volume, tone and speed separately. A muting switch, that completely smothers all machine sounds.

And the feather-light head-set never touches a hair of my head!



The word **DICTAPHONE** is the registered trademark of Dictaphone Corporation, makers of Electronic dictating machines and other sound-recording and reproducing equipment bearing said trade-mark.

# DICTAPHONE

## Electronic Dictation

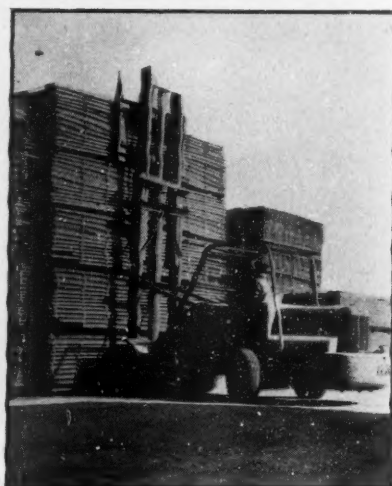
"It's said and done!"

what they think the buyers at the "market" will order. (Next week, a typical "market" will be held at Grand Rapids.) Retail stores generally sell furniture under their own names, don't promote manufacturers' trademarks.

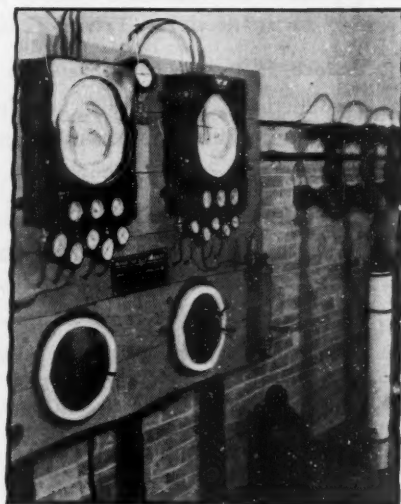
That kind of marketing stifles any "planned" product development, with its long runs of a particular model which can be changed at regular intervals. Instead, makers must submit furniture to buyers who get the "feel" and the "look" first-hand, then place orders. On the basis of these, the maker rushes a "cut" into production. Then the process is repeated for the next market.

• **Burdens**—The result of that kind of selling is that an individual manufacturer: (1) can't count on long runs; (2) must constantly change designs—but not

## Wood Treatment...

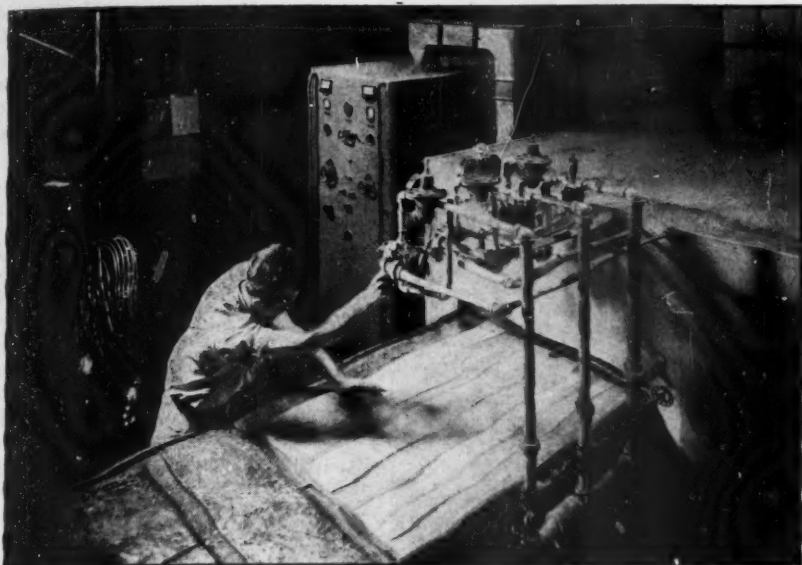


LIFT TRUCKS handle yard lumber at Tomlinson of High Point, add flexibility. A month in the open, wood is put in...



KILNS to remove moisture. These automatic instruments at Henredon's plant control heat and humidity

## Core-Making . . .



ELECTRONIC MACHINES, like this one at Mengel's plant, excite molecules and thus heat up and set the adhesive that binds wood strips into a solid core. After planing . . .



CORES ARE LAMINATED with expensive veneers. Drexel uses a hydraulic press to supply heat and pressure to the laminate, which is placed between stainless-steel sheets

too much; (3) makes little or no effort (there are a few exceptions) to "label" and build public acceptance for his own product; and (4) finds it difficult to break out of the established marketing pattern with a standard line.

The distribution method also puts a heavy financial burden on the retail stores. The store must: (1) guess consumer preferences well in advance; (2) tie up a lot of money in inventory; (3) use up valuable storage space. Result: big overhead—and the burden is placed, plus markup, on the buyer.

• **Design**—Tradition also worries the furniture maker in the question of design. The buying public, for better or worse, has been educated to like furni-

ture styled like the handmade designs of long-dead craftsmen. That means fussy detail, costly shapes, waste space. So a good part of the public buys furniture for its doodads rather than its utility (although beauty and utility are not incompatible).

Even so-called "modern" furniture isn't potentially much cheaper to make and sell than traditional furniture. Both types are large and bulky; both are made of bits and pieces chewed out of boards; both require many handlings of parts, painstaking assembly, laborious finishing. All furniture takes valuable plant space because it's bulky; it damages easily; it costs plenty to ship.

Those facts remain true whether the

WHAT DOES IT COST YOU  
TO MOVE MATERIALS  
OVER **200 FEET?**



"Trackless Train"  
hauls equivalent  
of 8-10 truck  
loads.

**Mercury "Trackless Train"**  
Speeds **MORE** Tonnage  
at **LOWER** Cost!

• Hauls every ton for less . . . travels wherever material movement dictates. Works as a cost reduction team with your fork trucks—relieving them of LONG HAUL transporting—freeing them to handle and stack.

Ask a Mercury Sales Engineer to call.  
Or, request Catalog No. 7-11.



Fork Truck  
loads Trailers



Tractor hauls  
Trailers to des-  
tination.



Fork Truck un-  
loads Trailers—  
stacks materials

THE MERCURY MANUFACTURING COMPANY



4148 S. Halsted Street  
Chicago 8, Illinois

**MERCURY**

TRACTORS • TRAILERS • LIFT TRUCKS

# I'll Save You Half

**Moving, Lifting and Stacking  
Your Materials**

**ALL YOU DO IS  
PRESS THE BUTTON!**



## Muscle Mike Makes Tons Feather-Light With Trans-Triplets' Feather-Touch Operation

Yes... all you have to do is PRESS THE BUTTON... and presto, Automatic's TRANS-TRIPLETS move, lift, tow... and even stack your material with amazing touch-of-thumb ease. Tons of material are made FEATHER-LIGHT... moved or stacked with FEATHER-TOUCH operation!

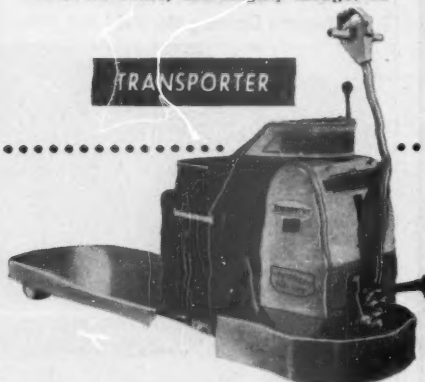
A miracle of scientific engineering puts Muscle Mike, the mighty midget in

TRANS-TRIPLETS' electric power units, to work for you. Labor's load is lightened, workers are released for more productive work, and management's load is lightened, too.

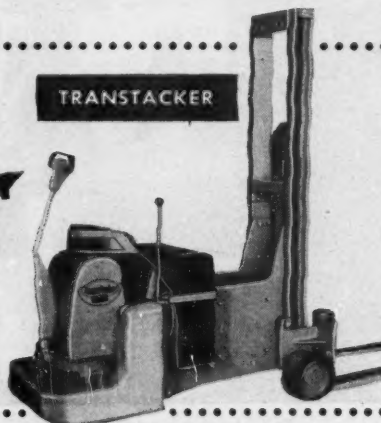
One plant with a single Transporter, cut handling costs \$24,480.00 in one year. And workers gained a bonus of freedom from gruelling, back-breaking manual handling. Mail coupon for complete facts.

Lifts and moves 2,000, 4,000 and 6,000 pound loads with feather-touch of thumb on buttons. Pallet and platform models. With ATCO Electric Lift or DUAL-LIFT Foot Pump.

**TRANSPORTER**



**TRANSTACKER**



Combines all features of Transporter, with a high-lift feature for stacking of 2,000 to 5,000 pound loads in seconds. Light in weight for limited floor and elevator capacities.

**TRANSTRACKER**



Will push or pull 6,000 pounds all day long... or up to 20,000 pounds intermittently, depending on type of load. Transporter power unit and finger-tip button control.

**MAIL COUPON** for free showing, "The Transporter Newsreel."



### AUTOMATIC TRANSPORTATION COMPANY

DIV. OF THE YALE & TOWNE MFG. CO.  
93 West 87th Street, Dept. H-8, Chicago 20, Illinois.  
Send me complete facts on how I can cut my material handling costs with Automatic's TRANS-TRIPLETS line of motorized hand trucks.

☐ Transporter ☐ Transtacker ☐ Transtracker  
Have an ATCO Specialist make a free survey of my material handling costs.  
Schedule me for showing of "Transporter Newsreel"

COMPANY NAME.....

BY.....

POSITION.....

STREET ADDRESS.....

CITY.....

ZONE..... STATE.....

MANUFACTURERS OF THE FAMOUS TRANSPORTERS, TRANSTACKERS AND SKYLIFT ELECTRIC TRUCKS

furniture is "case-goods" (bedroom, dining room, kitchen, desk, and office) or upholstered. These problems would be a lot simpler if the furniture manufacturer were working with metal. But metal is used today only to a limited extent. Wood is used in 90% of furniture manufacture.

## Furniture Manufacture

Let's take a production man's look at your dining room buffet. It has a top, two sides, a curved front, a back, four to six drawers, curved legs. If it's traditional in style, it will have moldings and trim, too. In any event, there are probably well over 250 individual pieces of wood in the complete assembly. Each has been trimmed out and cut to size, sanded several times, then assembled with adhesive into the final shape. That same buffet, no matter what its finish, has probably gone through about 20 or more finishing operations to bring it up to the color and surface finish it has in your home.

• **Process**—Such a piece of furniture begins as a tree, which is felled, cut into board-widths, and shipped to the plant. There it sits, air-drying in the storage yard, for at least a month. Then it goes into the dry kiln, where it stays another 30 days under controlled conditions of temperature and humidity. Moisture content by that time is down to about 5% or 6%. The boards, after they leave the kiln, are generally "air-tempered" again for a few days before they enter the plant.

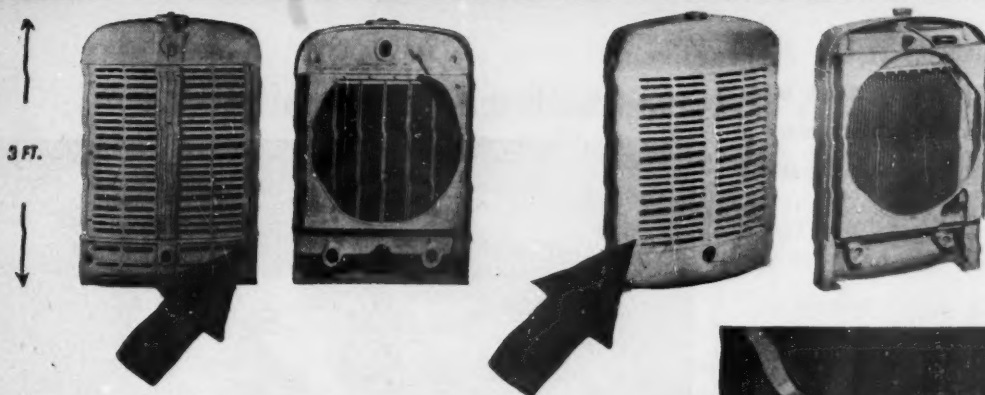
When the wood is ready for a "cut," it is planed on both sides and sawed into appropriate sizes. (Some plants cut first, plane afterward.) Knots and imperfections are discarded. Edges on individual pieces are squared up, so they will fit snugly when glued together. After edges are glue-coated, the pieces are assembled into the "core," clamped in a batch press and exposed to heat for several hours. After the core sets, it is planed top and bottom and is ready for veneering.

• **The Top Layer**—Veneers (the top layer) come in long, paper-thin strips. Generally, a furniture maker buys all the strips from a whole tree so that grain-ing can be matched. The strips are edge-joined by an ingenious gluing machine into wide sheets, then are plied onto the cores under pressure. When the veneered core is cut to final dimension and carefully sanded, it becomes the top or side of your buffet.

Trim pieces, molding, drawer sides, backs, and bottoms are meanwhile being cut to proper dimension and contour from solid stock, then sanded several times.

• **Frame First**—Assembly begins with the frame and legs, with special jigs and adhesives being used to insure ac-





## Casting-to-Stamping saves as much as 30% for Young Radiator Co.

**450-Ton Bliss Hydraulic Press solves  
delivery, weight and durability problems**

To achieve lighter, stronger and more cleanly designed radiators for automotive and industrial applications, the Young Radiator Company, of Racine, Wis., manufacturers of quality heat transfer equipment, recently converted the outside casings, tanks and side members from castings to formed steel parts. As it has consistently for 20 years, it chose Bliss to specify the press for the job. The resulting savings have been as much as 30%.

Today this 450-ton single-action hydraulic press is the pride of the plant. The weight of the radiators has been more than halved, and the drawn tanks provide as much cooling and are more durable than their cast counterparts. Besides the drawing of tank shells and housings, the press is used for forming operations on steel, aluminum and other metals.

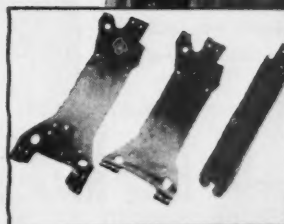
Bliss, as it has for 90 years, did more than build a press. It provided the vital engineering knowledge for its maximum production. That's why 70% of Young's press equipment is Bliss-built...why President F. M. Young, who says, "We have long been advocates of Bliss presses and service," attributes much of the credit for his company's press production to Bliss engineering counsel.

This service and engineering counsel are at your disposal. You'll find, as Young Radiator Company has for more than two decades, that "Bliss" on your press is more than a name—it's a guarantee!

### **E. W. BLISS COMPANY, DETROIT 2, MICHIGAN**

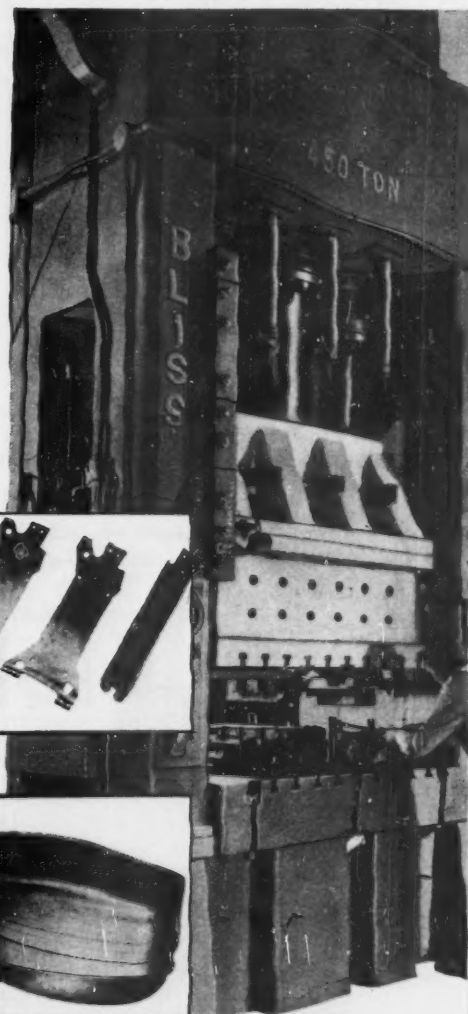
*Mechanical and Hydraulic Presses, Rolling Mills, Container Machinery*

WORKS AT: Toledo, Cleveland, Salem, Ohio; Hastings, Mich.; Englewood, N. J.; Derby, England; St. Ouen sur Seine, France • SALES OFFICES AT: Detroit, Hastings, Mich.; New York, Rochester, N. Y.; Cleveland, Dayton, Toledo, Salem, Ohio; Philadelphia, Pittsburgh, Pa.; Chicago, Ill.; New Haven, Conn.; Windsor, Ont.



Feature of this Bliss Hydraulic Press which delights Young is its extreme flexibility: use of the outside cylinders for jobs up to 175 tons pressure; availability of full 450-ton pressure for heavier work, ability to accommodate off-center loads; quick advance and quick return; inching for die-setting and safety afforded by central push-button operation.

Above photo shows second and third forming operations of 18-gauge steel on radiator side members (inset, top). A third die will handle the initial piercing operation. A Bliss hydraulic cushion ejects the stamping...this cushion was previously used as a blankholder to draw the shell, 7 $\frac{7}{8}$ " deep x 18" x 27" (inset, bottom), which is subsequently split in the center to form the top and bottom parts of the radiator housings shown at heading of page.



STAY AHEAD  
WITH *Bliss*

**BLISS BUILDS MORE TYPES AND SIZES OF  
PRESSES THAN ANY OTHER COMPANY**

**Every business can use  
Teletalk...ask your  
nearest Graybar Dealer**



Experiences of the kind described on the opposite page are typical of the way thousands of business men are taking advantage of the remarkable time-saving advantages of "Teletalk."

"Teletalk" intercommunication systems are available in a wide variety of models to meet your requirements. Whether your business is large or small, be sure to find out about the many advantages available with a "Teletalk" intercommunication system.



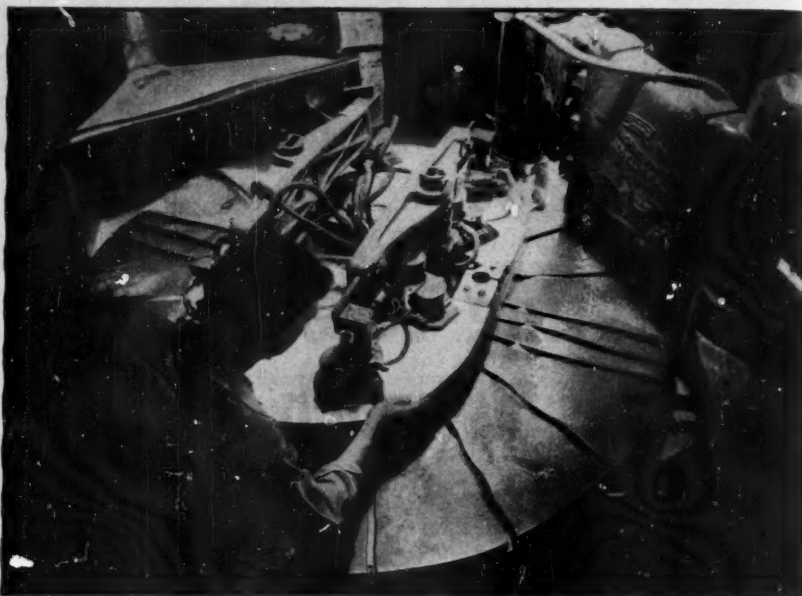
"Teletalk" is convenient to buy... If your Classified Telephone Directory does not list a "Teletalk" dealer, get in touch with the nearest Graybar House for information about a dealer who will be qualified to serve you. There are now Graybar offices in 101 principal cities.



**WEBSTER ELECTRIC**  
**Teletalk**  
REG. U.S. PAT. OFFICE  
INTERCOMMUNICATION SYSTEMS



**Wood Cutting . . .**



**CUTTING A TABLE TOP** to exact contour at the Mengel plant. This is a typical high-production cutting operation. Another high-production process is making. . .



**A "SERPENTINE" FRONT.** This requires a built-up block of corewood glued together, under pressure, then cut by saw to contour. Drexel, after this cut, represses the block to cut down possible warpage. Other cutting, like . . .



**CARVING OF TABLE LEGS** is done with a pantographic-type machine. At most plants, as a workman follows a template (or master pattern) of the leg, many automatic cutters trace his movements, provide exact "hand-cut" duplicates

curacy and proper strength. Drawers are fitted into the frame, and trim and molding added, by hand. All parts are doweled and wood-blocked for added stiffness. After sanding and inspection the assembled piece of case-good moves to the finishing line.

Finishing includes filling, staining, and lacquering—with rubbing after each operation—followed by oven-baking. It can require as many as 30 separate operations on one piece of furniture. The number of operations is dependent

on the quality—and price—of the piece.

If the furniture has "serpentine" (curved) fronts or parts, additional laminating work is required. Heavy laminated blocks are built up of corewood glued together, held under pressure for a number of hours, then sawed out to the desired contour.

• **Basic Steps**—Different pieces, of course, require different methods and scheduling. But the basis is always the same: air-dry, kiln-dry, saw, sand, assemble, sand, finish. These slow, tedious

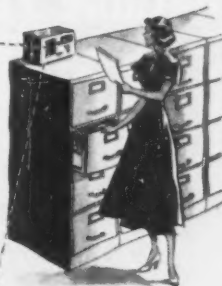


## Saving time on long distance calls is important . . . Teletalk does it for Artcraft Hosiery Company

In her busy office in New York's Empire State Building, the stylist and advertising manager for Artcraft Hosiery Company spends much of her day on the long distance telephone. She is in touch with specialty stores from Maine to California and with the company's plant in Darby, Pennsylvania. "If I didn't have 'Teletalk'," says this executive, "I would have to buzz for the girls in the general office, wait for them to come, tell them what I want, and wait again for them to return with the information. 'Teletalk' allows me to talk to the right person and immediately give the party calling the desired information without leaving my desk. It makes for greater all-around efficiency



and reduces the length of telephone conversations," she said, speaking of Artcraft Hosiery Company's "Teletalk" installation which consists of a master station, at her desk, and six strategically located speakers.



All over America, business concerns are saving valuable time and energy in stores, factories, offices, warehouses . . . everywhere . . . by instant voice-to-voice contact over "Teletalk." Let your local distributor or dealer show you how an economical "Teletalk" installation can fit your requirements whether your business is large or small.

Look him up in your classified telephone directory . . . or write to us.

**WEBSTER ELECTRIC**  
**Teletalk**  
REG. U.S. PAT. OFFICE  
**INTERCOMMUNICATION SYSTEMS**

Stenographer at Artcraft Hosiery Company transmitting message by "Teletalk."

Licensed under U. S. Patents of Western Electric Company, Incorporated, and American Telephone and Telegraph Company

**WEBSTER**  **ELECTRIC**  
RACINE WISCONSIN

Established 1909

"Where Quality is a Responsibility and Fair Dealing an Obligation"





## SPEED-UP Machine Feeding!



### GLOBE PRODUCTION LIFT

Cut machine-feeding costs . . . raise materials UP to machine level with a Globe Production Lift. Saves costly time-lag of workmen stooping or reaching. Boosts production as much as  $\frac{1}{3}$ . Foot pedal control keeps materials at proper level. Installs anywhere. Write today for illustrated Bulletin BW-1.

**GLOBE HOIST COMPANY**

Philadelphia 18, Pa. Des Moines 8, Iowa

## GLOBE

LIFTS and ELEVATORS

*Is Your Watchman  
Watching?*



### Reduce Insurance Costs!

So accurate, so tamperproof, so dependable, that insurance rates drop when you adopt this economical, easy-to-install CHICAGO Watchclock System. (Approved by The Underwriters Laboratories, Inc., and The Factory Mutuals Laboratories.)

ASK US

for a sample dial, together with full details on the new CHICAGO Spartan model.

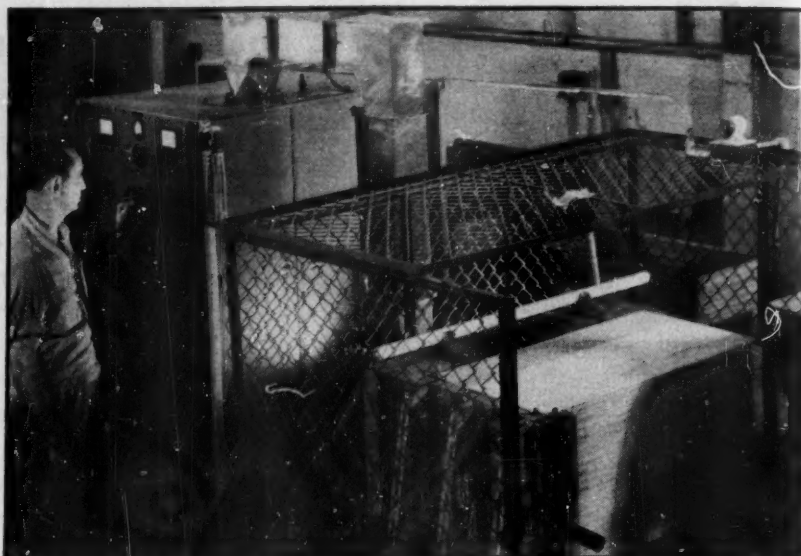


The first - and still the best!

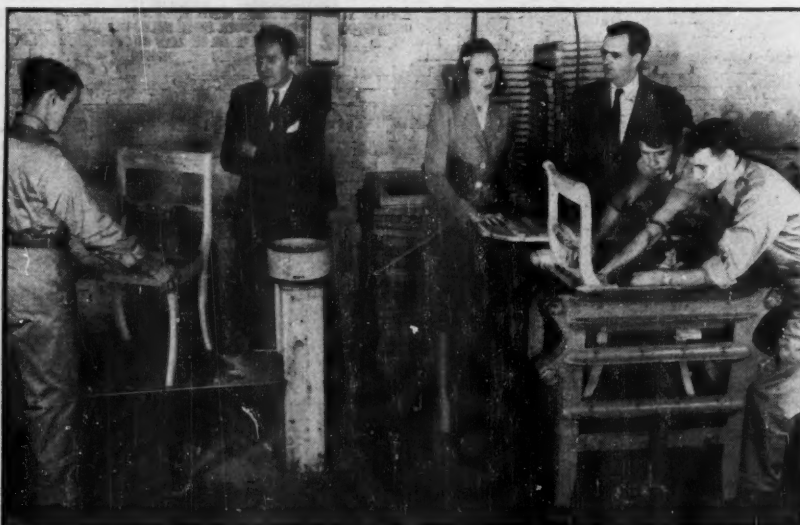
**CHICAGO WATCHCLOCK**

Offices in Principal Cities  
1524 S. Wabash Ave., Chicago 5  
For Over 60 Years

## Assembly . . .



**ELECTRONICS** can be adapted to assembly. At Mengel, special jigs hold glued parts in position while electronic heat is applied. Other pieces such as . . .



**CHAIRS** are also assembled in special jigs. At Drexel, synthetic adhesives, plus blocks and screws, lock parts in position while chair is held in frame under pneumatic pressure

steps are the ones getting production study today.

## Furniture Mechanization

What kind of mechanization is in use today, and what is slated for use in the near future?

• **Questions**—Mechanization to be successful must recognize these basic problems:

(1) How to deal with variations in wood? (It's organic, so its characteristics are never quite the same from lot to lot.)

(2) How much moisture should be removed? (Too-dry woods act like blotters in moist climates; too-wet woods

warp as they gradually dry out in service.)

(3) How can money be saved by good planning of routine cutting, planing, and edging?

(4) How should wood scrap be handled?

(5) What should be used for assembly: animal or synthetic glues, nails, screws? Should clamp presses, steam ovens, or electronic devices set the adhesives?

(6) What can be done to improve production scheduling?

(7) Can finishing schedules be shortened without hurting appearance and serviceability?

(8) What can be utilized to mini-



# What could Aircraft Engineering do for your product?

**N**EW techniques in fabricating light aluminum and magnesium alloys, developed in building wartime aircraft, are now reducing material and production costs on many types of metal products, ranging from refrigerators, window frames and furniture to radio cases and radar equipment.

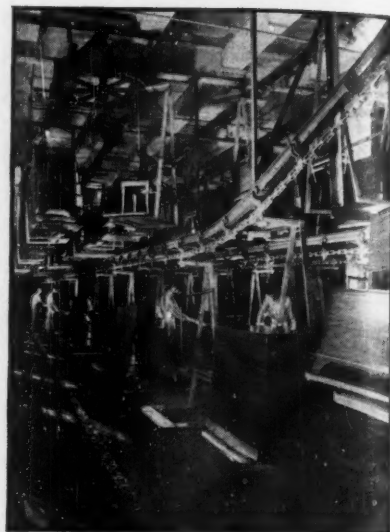
Many leading manufacturers have found it pays to turn over their entire operation, including redesigning, re-engineering, tool-

ing up, production and assembly, to Goodyear Aircraft Corporation. Goodyear's veteran technical staff and unrivaled metal-working facilities assure you of all the strength-gaining, weight-saving advantages of modern light-metal construction.

Let us show you what we have done for others. A Goodyear engineer will be glad to call at your office with complete information. Write: Goodyear Aircraft Corporation, Dept. 65, Akron 15, Ohio.

## GOODYEAR

AIRCRAFT CORPORATION



CONVEYOR  $2\frac{1}{2}$  miles long carries furniture through the air-conditioned finishing rooms at the Mengel plant

is doing that right now. Another way that high-quality manufacturers can save is by introducing improvements on existing machinery (high-speed cutters or special feeds, for instance); both Kindel Furniture Co. and Johnson Furniture Co. of Grand Rapids have done this.

• **Conveyors**—When conveyors are used for finishing operations on high-grade furniture, they must: (1) have provision for taking products off the line at pre-set points for spraying or rubbing; and (2) move relatively slowly, because finishing is done at what amounts to a snail's pace.

The newest conveyor installation is at the Grand Rapids Chair Co. plant in Grand Rapids. This is a floor-type; furniture travels on individual pallets which are pulled along by a power chain. It takes one piece of furniture a day and a half to travel that conveyor, an indication of the care given to finishing in that price bracket.

### Medium and Medium-High Quality

This field has been entered enthusiastically in recent years by several southern manufacturers. They started from scratch, built most of their plants as single-story structures. They try to keep skilled labor at a minimum, and do as much as possible mechanically. Even so, to anyone at all familiar with metal-working production, for instance, most of the plants seem dated.

• **Electronic Gluers**—Southern plants handle scrap on conveyors, use conveyors to move pieces into and away from high-speed cutting machines. Many of them have adopted electronic-heat devices for gluing core stock. Notable use of this technique is being made by The Mengel Co. in Louisville, which also

### ADVERTISED

Advertising is an integral part of the GRAPETTE FRANCHISE.

Distribution is established and sales maintained by effective newspaper and radio presentations prize-winning poster designs . . . unusual theater ad-films . . . distinctive point-of-purchase reminder signs—all planned to produce profitable sales . . . all paid for by the parent company.

Now bottled and distributed by franchise holders in 33 of the United States and in Central and South America.

The GRAPETTE franchise is granted—not sold. Perhaps the territory you want is yet available. Your inquiry is invited.

(No. 2 of a series in National Magazines—No. 1 appeared in the May 29th issue of this publication)



The Grapette Company  
INC.

CAMDEN, ARKANSAS, U. S. A.

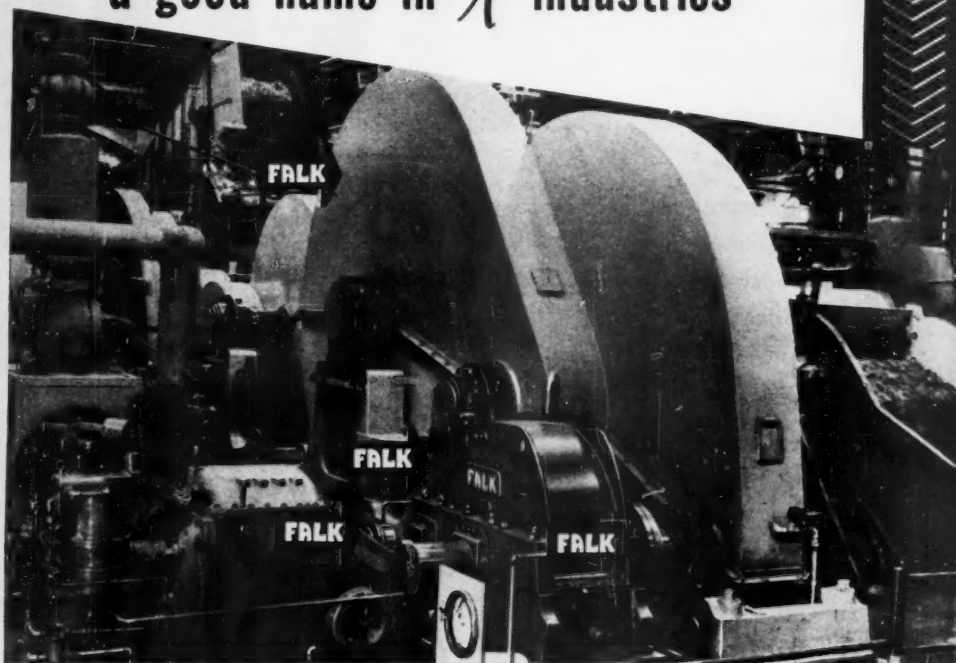
Grapette  
SODA



Year-after-year performance  
of many diverse operations has proved

# FALK

*the processing*  
a good name in *1* industries



Installation in a modern Southern sugar mill showing Falk High Speed Unit, Falk high-speed and low-speed couplings and large (enclosed) Falk gears

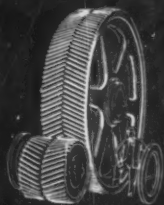
**P**ERHAPS in no other field of modern industrial activity does geared and coupled power play a more vital and versatile role than in the great processing industries. Here you'll find Falk power transmission products giving yeoman service on countless jobs! Gears, flexible couplings, Motoreducers, speed reducers, drives of many kinds . . . all Falk-made for highest performance rating, all backed by Falk's more-than-half-century of continuous metallurgical and technical research . . . adherence to precise engineering techniques . . . sound methods of selling and servicing. Topping **all** these is a rigidly maintained worker-customer-management relationship which not only has made, but **keeps**, the name FALK a good name in industry.

Precision manufacturers of Speed Reducers . . . Flexible Couplings . . . Motoreducers . . . Herringbone and Single Helical Gears . . . Heavy Gear Drives . . . Marine Turbine and Diesel Gear Drives and Clutches . . . Steel Castings . . . Contract Welding and Machine Work. District Offices, Representatives, or Distributors in Principal Cities.

THE FALK CORPORATION, Milwaukee 8, Wisconsin

Established 1892

## SOME TYPICAL FALK PRODUCTS



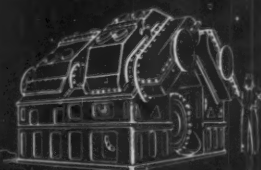
**HERRINGBONE AND SINGLE HELICAL GEARS**—Diameters 1 inch to 18 feet. Face widths 1 inch to 7 feet.



**HIGH SPEED DRIVES**—Ratios from 2:1 to 12:1. Speeds up to 8000 rpm and higher.



**STEELEX AND AIRFLEX COUPLINGS**—Types and sizes for every industrial application.



**MARINE DRIVES**—More than 25 million horsepower of Falk gears in ships.

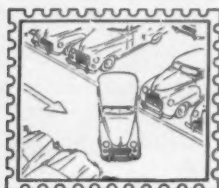
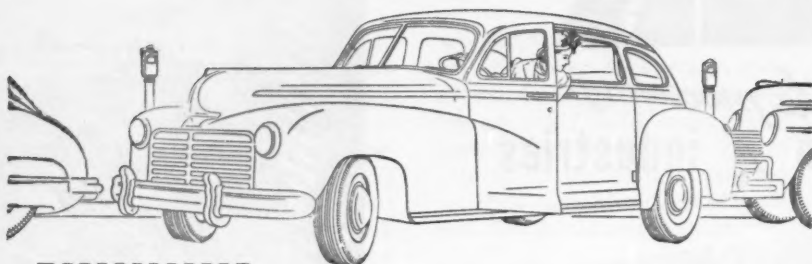


**SPECIAL GEAR DRIVES**—Special gear drives—any size or type—any kind of service.



**STEEL CASTINGS AND WELDMENTS**—Acid open hearth steel castings from 1 lb. to 100,000 lbs. Weldments in comparable sizes.

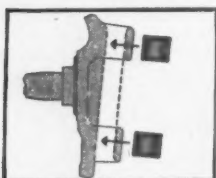
# ...and they help you **PARK** on a postage stamp



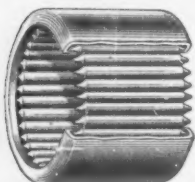
**Parking is easier...** for anti-friction Needle Bearings make wheels easier to turn, especially at slow speeds.

LUBRICATION RECORD		
SERVICE	DATE	BY
MOTOR OIL	9-26-41	J.S.
CHASSIS	9-26-41	J.S.
WHEEL BEARINGS	9-26-41	J.S.
TRANSMISSION	9-26-41	J.S.

**Long-lasting lubrication**... because Needle Bearings are designed to "hold in" oil or grease... keep out dust and dirt.



**Cut-away view shows** where Needle Bearings work to save you work, on the kingpin on which the front wheels pivot.



**NEW EASE AND FREEDOM** in getting *in* and *out* of tight parking spaces with inches to spare is just one of the advantages anti-friction Needle Bearings are bringing to many of today's new cars. Others you'll also appreciate will mean new ease on your pocketbook... thanks to the efficient lubrication inherent in the Torrington Needle Bearing design... reduced wear that means better maintenance of front wheel alignment... less vibration and front wheel "fight."

Thoroughly tested in hundreds of automotive and aircraft applications, Torrington Needle Bearings on the kingpin assemblies and steering gear mechanisms are among the design improvements modern car manufacturers are adopting. These compact units help to maintain steering ease with the new extra low-pressure tires and to bring you greater value in performance and efficiency in today's new cars. Ask *your* new car dealer... he'll tell you!

## THE TORRINGTON COMPANY

Torrington, Conn. • South Bend 21, Ind.

District Offices and Distributors in Principal Cities

# TORRINGTON NEEDLE BEARINGS

uses it with special jigs for assembly of furniture.

Thomasville Chair Co., of Thomasville, N. C., uses highly mechanized high-frequency electronic gluing. The speed of this machine is used as a standard for timing other plant operations. Thomasville also has automatic feeding devices for its cutting machines, and an elaborate overhead conveyor system for finishing. Reasoning is that an overhead conveyor uses waste space efficiently.

• **Core Machine**—Other southern companies, like Drexel Furniture Co., in Drexel, N. C., have developed special machines for core-making. Drexel's machine is steam-heated, the cores are assembled without clamping pressure which can cause warpage. Tomlinson of High Point also steam-heats its cores. Reasons: It's not complex; the steam method is on a continuous, rather than a batch, basis; no skill is required to run it; and steam is available.

Throughout the South there is an increasing trend toward better production planning. Drexel, for example, has a production-planning division aimed at cutting out bottlenecks and meeting promised deliveries.

Another widespread practice is the use of special jigs (to hold work while it's being processed) and metal templates (master patterns of a part). Quality control is also getting attention: Drexel inspects all veneers electronically, also makes continuing checks on the moisture content of its products during manufacture.

Other things seen in southern plants: fluorescent lighting, centralized dust collection, water curtains on spray booths.

## Mass-Market

In this field many southern plants and some midwestern plants turn out hundreds of pieces of good-quality furniture each day. Good layout is noticeable, and machines are run at high speed. Some of the plants have installed electronic gluing equipment that operates on a continuous basis. Others use the clamp-press and batch method, but step up its operation by conveyors (like Kroehler Mfg. Co. of Kankakee, Ill.). Kroehler, the largest furniture manufacturer in the world, is also experimenting with special jigs for electronic assembly, production scheduling, and faster-drying finishes.

• **Finishing Operation**—Johnson-Carper Furniture Co., in Roanoke, Va., manages high-production without sacrificing quality. Extensive thought is given in this plant to finishing; baking enamels which don't require too many coats are used. Assembly work is broken down into small operations; this moves pieces faster because the individual worker need worry about only one detail of as-

**HOW TO GET PROMPT DELIVERY ON SHEET METAL PRODUCTS:**

# YOU

## **FURNISH THE STEEL**

If you can supply us with 12 to 24 gauge sheet steel, we will buy the steel from you and ship the pound for pound equivalent in

### **EITHER**

—Lyon standard products—any selection of items in production at regular published prices (see partial list below)

### **OR**

—your own assemblies, subassemblies or parts, etc., for your product—to your specifications—in an even wider range of gauges—8 to 30.

# LYON

## **WILL MAKE THE PRODUCT**

**LYON  
METAL PRODUCTS,  
INCORPORATED**

General Offices, 610 Monroe Ave., Aurora, Ill.

Branches and Dealers in All Principal Cities



### **A PARTIAL LIST OF LYON PRODUCTS**

- |                        |                     |                   |                    |              |                 |                           |
|------------------------|---------------------|-------------------|--------------------|--------------|-----------------|---------------------------|
| • Shelving             | • Kitchen Cabinets  | • Filing Cabinets | • Storage Cabinets | • Conveyors  | • Tool Stands   | • Flat Drawer Files       |
| • Lockers              | • Display Equipment | • Cabinet Benches | • Bench Drawers    | • Shop Boxes | • Service Carts | • Tool Trays • Tool Boxes |
| • Wood Working Benches | • Hanging Cabinets  | • Folding Chairs  | • Work Benches     | • Bar Racks  | • Hopper Bins   | • Desks • Sorting Files   |
| • Economy Locker Racks | • Welding Benches   | • Drawing Tables  | • Drawer Units     | • Bin Units  | • Parts Cases   | • Stools • Ironing Tables |



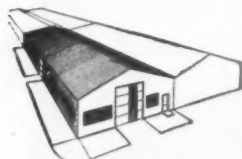
# LURIA STANDARD BUILDINGS

A balanced line of Standard Buildings  
to satisfy every industrial need



Luria offers a complete line of Standard Buildings specifically planned to be adaptable for all industrial requirements. Several basic types in a wide range of sizes can be used individually or in a variety of combinations.

Luria buildings are permanent structures fabricated from heavy structural steel and designed to comply with the latest building codes.



- UNIT WIDTHS  
40' to 100'
- LENGTH ADJUST-  
ABLE IN INCRE-  
MENTS OF 20'
- CLEARANCE AT EAVES 12' to 20'

A choice in  
the use of  
collateral  
materials  
and the lo-  
cation and

type of doors and windows increases  
the utility and allows complete free-  
dom in architectural treatment.



## LURIA ENGINEERING CORPORATION

500 Fifth Avenue, New York 18, N. Y.  
1734 Candler Bldg., Atlanta 3, Georgia  
Fidelity Philadelphia Trust Bldg., Philadelphia 9, Pa.  
Chamber of Commerce Bldg., Boston 10, Mass.  
First National Bank Bldg., Chicago 3, Illinois



sembly. Skill is not too essential and replacement of labor is simplified.

There are indications that manufacturers for the mass market are getting ready for an overhaul of their production methods. This is evident in the relocation work going on in plants, in pilot-plant studies of new techniques, in attitudes toward the use of modern materials-handling equipment. The first wholesome effects of better production methods on price will no doubt be felt in this area of manufacture.

## Materials

Many in the industry are worried about the drain on hardwood supplies. Over 50% of the wood that goes into a furniture plant becomes sawdust that is usually burned in the boilers. The latest estimates of the American Forest Products Industries Assn. show that cutting of hardwoods is exceeding new growth. Obviously that drain is not all due to furniture manufacture; other industries use hardwoods too.

• **Statistics**—The latest figures on hardwood consumption by the furniture industry are based on 1940 estimates by the U. S. Forest Service. That year the industry's total use was about 3.5-billion board feet. In 1945, total hardwood supplies were estimated as 304.6-billion board feet; growth that year was 13.5-billion board feet; over-all drain was 15.4-billion board feet.

• **Substitutes?**—Despite the lack of recent statistics on hardwood, manufacturers are worried about future supply. Price has gone up, too. For these two reasons, furniture makers are studying alternate materials. Some, like Drexel, are experimenting with resin-impregnated sawdust, pressed into panels, as a core material. But this is considerably more expensive than wood coring. Others, like Mengel, are studying the use of honeycombed paper cores. In this process, veneers are laminated and a finish given to the veneer all in one operation. Cost here is said to be less than conventional construction.

Metals and plastics don't get too much consideration in this search for new materials. Reasons: Metal itself isn't easy to get; most manufacturers feel that the public isn't ready yet for extensive substitution of metal for wood in furniture. As for plastics, they are already available (in laminated plywood form) for tabletops and specialty items. Mengel uses patented plywood drawers.

But the days of "molded plastic" furniture are far off. Transparent methacrylate has been used for chairs and tables, but costs are very high and durability, as compared to wood, is yet to be proved. Besides, there just isn't enough plastic material available to replace even a small part of the wood used in furniture.

## Future Furniture

Research is a pretty new word to most furniture manufacturers. A few like Mengel and Drexel, are in it up to their ears. Research is not confined to materials alone: it goes into new finishes; new methods of construction that will use metals and plastics in combination with wood; new fastening methods that will eliminate many tedious gluing operations; new adhesives that set faster; methods of making laminated construction burnproof.

• **Outsiders Hired**—Some manufacturers now have outside laboratories working on research projects for using the newer plastic compounds in finishes for furniture pieces.

Companies that make upholstered pieces are finding that foamed rubber, combined with springs, gives a better job, at about the same cost as the old tied-spring-and-felt construction. In addition, assembly is faster, and the pieces don't sag with age.

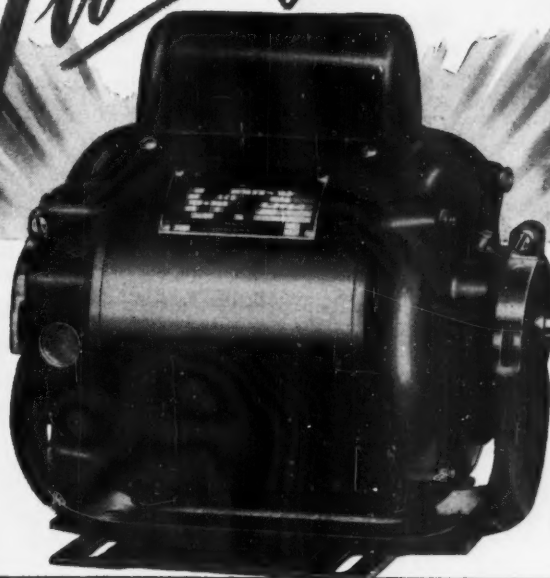
• **Plywood Techniques**—Thaden-Jordan Furniture Corp., in Roanoke is pioneering in the development of plywood furniture. Most of its products are highly modern, but its techniques are being carefully watched by the industry. Special molds are used. Laminates are laid in, covered with a sheet of fibrous glass in which heating wires are imbedded, and the mold closed. Pressure and heat set the urea adhesive and form the part at the same time. Doors and drawer fronts are cut out of individual moldings, then fitted back on final assembly to preserve the pattern on each piece. Thaden-Jordan's methods are not mass-production by any means, but they point the way to some interesting ways of saving assembly time.



LAMINATED FURNITURE is produced at Thaden-Jordan with special molds and synthetic adhesives that bind and shape veneers into finished contour

# 58 YEARS

# *of Engineering*



## *in the New* "66" NEMA Series **EMERSON-ELECTRIC** **MOTORS**

1/2 and 3/4 HP Single-Phase Capacitor, Polyphase and D. C.

Emerson-Electric announces a new series of 1/2 and 3/4 HP Motors in Standard NEMA "66" frame, which meets all NEMA Electrical and Mechanical Specifications.

Lighter in weight, smaller in size, than the previous frames of similar ratings, yet the new "66" Series provides improved operating efficiency characteristics.

Standard specifications include drip-proof frame with either sleeve or ball bearings; with or without thermal overload protector; rigid or resilient base. The single-

phase capacitor motor, illustrated, will have companion Polyphase and Direct-Current Frames of same mounting dimensions.

If you have requirements within these ratings, this new development in Emerson-Electric motor design, deserves your investigation. For full information, write THE EMERSON ELECTRIC MANUFACTURING CO., St. Louis 21, Mo.

### **Emerson-Electric Motor Built in 1896 . . . Still in Service**

In 1890, Emerson-Electric started manufacturing motors. Six years later the "grandfather" of the present "66" series was shipped to a dealer in New York. Now, 52 years later, it powers a saw in the basement workshop of Charles B. Woodward, Philadelphia, Pa. The same rating in the "66" Series, measures 11 inches *shorter*, 7 inches *narrower*, 4 3/4 inches *lower*, and is 101 pounds lighter in weight.



# **EMERSON** **ELECTRIC**

MOTORS · FANS      APPLIANCES

*Your Plans are Ready*

## Order a VOKES STANDARD BUILDING



### The All Purpose Building

- For all types of manufacturing, assembly, printing, warehousing
- Engineered for Cranes or Monorails
- Any length, in 20 ft. bays
- Clear-Span Trusses, 40, 50, 60, or 80 ft.
- Clearance under trusses of 12, 16, 20 and 24 ft.

Standardization always means faster delivery and more building space for your dollar. Write, wire or phone today.

**The**  
**VOKES**  
**H. L. VOKES COMPANY**  
1010 Wayside Road, Cleveland 10, Ohio



### Why Molly Makes So Many Trips

- Four o'clock sag lowers morale in offices, causes unnecessary trips away from the desk.

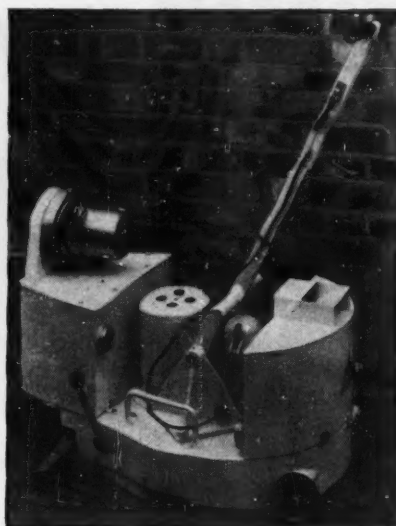
This happens because, air conditioned or not, office air often gets lifeless during warm weather.

● Hafner Associates, Inc., textile firm, whose employee relations are as fine as their fabrics, use Airkem Chlorophyll Air Freshener to solve this problem. They say: "The folks in our offices complained of stale air. Since we have been using Airkem Service their work has generally picked up and they finish the day as fresh as a new straw bonnet."

● Try Airkem Air Freshening Service at our expense. See what it will do for you... how inexpensive it is. For most uses Airkem Service costs a penny or so per person per day. Look for Airkem in your phone book or write us at 7 East 47th Street, New York 17, N. Y.

**Airkem**  
FOR AIR OF QUALITY

## NEW PRODUCTS



### British Labor-Saver

LONDQN—A fast-working floor cleaner is a labor-saver that Fraser Tuson Products, Ltd., hopes will ring the bell in the export markets. In a single operation, the machine soaps the floor, scrubs it with rotating brushes, then scoops up the dirty suds to leave the floor clean and dry. Doing all three jobs at once, one worker can clean a path 18 in. wide at a rate of 40 ft. per min.—covering about 3,000 sq. ft. an hour.

The cleaner has two motors. One works the scrubbing brushes; the other drives a suction system that picks up the suds from the floor and puts them in a tank. The buyer can get a variety of brushes for different types of floors and floor coverings. The company, which is at Beckenham, Kent, has priced the cleaner at \$540.

### Creep Killer

Stopping the "creep" in your automobile is a job that Weiss Brake Control Co.'s brake holder will do automatically. The Brake-A-Matic will lock brakes on any kind of road; it is intended especially for cars with automatic transmissions.

The device doesn't go to work until the car has come to a dead stop. Releasing the accelerator pedal or braking the car to slow down won't start the holding action.

Here's how the Brake-A-Matic works: When the car is fully stopped with (1) the ignition on, and (2) the accelerator released, an electrical circuit on the device closes. This energizes a solenoid valve attached to the master brake cylinder. The valve closes, preventing the return of brake fluid from the wheel-

brake cylinders to the master cylinder. This trapping of the hydraulic fluid holds the brakes in "on" position. When the accelerator pedal is pushed down, the electrical circuit is opened, the solenoid valve is de-energized, and the pressure on the brakes is released. The solenoid valve stays open when the ignition switch is off.

According to Weiss, the Brake-A-Matic can be installed in less than an hour. It draws about 1½ amp. of current while operating. The company's address: 209 E. 64th St., N. Y. 21.

● Availability: now for Chrysler and De Soto; later for Oldsmobile, Pontiac, Cadillac, and Buick.

### Lightweight Hose

An air hose—said to be as flexible as a lamp cord, and light in weight—is made for use with small tools by B. F. Goodrich Co., Akron, Ohio. The High-flex in a ¼-in. size weighs only 8.8 lb. per 100 ft. An ordinary hose of the same size and length would run about 20 lb., Goodrich says.

Among advantages cited for the hose are: (1) easy handling; (2) few kinks; (3) better workability in close quarters. Oil-proof, inside and out, the hose won't swell or flake. Working pressures can go as high as 250 p.s.i. Goodrich says the hose braid has been designed for strength at the angle of maximum stress, the tube and braid for minimum expansion under pressure.

● Availability: 2 to 4 weeks.

### Easy-to-Use Duplicator

A new liquid duplicating machine moistens paper to be printed without wicks or jets. It does it by using a train of rollers, something like the inking system of a printing press. (Liquid duplicating uses a master sheet prepared with special carbon on a typewriter. Sheets run through the machine are moistened before printing with a special fluid.)

By doing away with wicks and other trouble spots in the design, L. C. Smith & Corona Typewriters, Inc., thinks it has made the machine simple enough for anyone to run after five minutes' instruction. Electrically driven, the new Vivid Duplicator will automatically handle work ranging from 3x5-in. cards to 9x17½-in. sheets. Top speed is 75 copies a minute.

Fluid capacity of the machine (1 gal.) is big enough to run 10,000 to 12,000 copies before refilling. When the machine is shut off, fluid in the distributing trough returns automatically to the reservoir. Master sheets can be used repeatedly until the ink has worn off. The company's Vivid Division, which



# SELLING

*... and what it  
can do for You!*



**5**

**CLOSE THE ORDER**

MECHANIZED SELLING uses the high speed and low cost of advertising to cover the first three steps in manufacturing a sale. It frees your *sales* force to concentrate on *sales* jobs.

MECHANIZED SELLING does the vital but time-consuming chores of making preliminary contacts, arousing interest, and creating preference for your product. When MECHANIZED SELLING performs these important functions consistently, your salesman can concentrate much more of his specialized ability and limited working time on the job that he alone can do, and do best.

THE END RESULT IS LOWER UNIT COST PER SALE

Published by McGraw-Hill, "Mechanized Selling at Work" is a searching discussion of this important subject. You can get your free copy simply by asking your McGraw-Hill man, or writing for it today.



**McGRAW-HILL**

**P U B L I C A T I O N S**

*Headquarters for Industrial Information  
330 West 42nd Street, New York 18, N. Y.*



## FAMOUS QUOTES

### HISTORICALLY SPEAKING

"ALL FOR ONE, AND  
ONE FOR ALL" \*

### GENERALLY SPEAKING

"the container is part  
of the product"

... it's more than a slogan, more than a catch phrase—it's your positive assurance of a better container for your product. Better because General Engineered shipping containers assure protection and economy by combining strength with light weight. When needed, special inner-packing, blocking, and bracing are also prescribed.

Furthermore, the container and the product can frequently move down the production line together—as a unit—saving time and man-hours!

General boxes are engineered to the packing requirement; they are actually "a part of the product." For further details on this important subject, send for your free copy of "The General Box."

*\*The rallying cry of Athos, Portos and Aramis, the Three Musketeers, made famous by the great novelist Alexander Dumas.*



General Wirebound Crate



General Cleated Corrugated Container



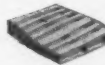
General Corrugated Box



General Nailed Box



General All-Bound Box



General Lift Pallet

## GENERAL BOX COMPANY .. engineered shipping containers

GENERAL OFFICES:  
502 N. Dearborn St., Chicago 10  
DISTRICT OFFICES AND PLANTS: Brooklyn, Cincinnati  
Detroit, East St. Louis, Kansas City, Louisville, Milwaukee  
New Orleans, Sheboygan, Winchendon, Natchez.  
Continental Box Company, Inc.: Houston, Dallas.

makes the machine, is located at Syracuse 1, N. Y.

• Availability: immediate.

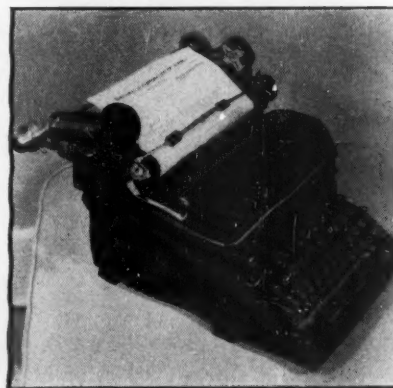
### Hydraulic-Line Protector

Breakage in hydraulic lines between a tractor or truck and a towed unit can be licked, says Ulrich Mfg. Co., with an automatic breakaway coupler. When the trailer or implement in tow hits an obstruction large enough to break the safety hitch between the two vehicles, the coupling immediately comes apart and, at the same time prevents loss of fluid from the lines.

A cable or chain is attached to the equipment being towed and to the sleeve of the coupler. When the safety hitch breaks, the chain pulls back the sleeve and opens the coupling. Sphere valves automatically seal both ends of the hydraulic line.

The coupler can be connected under pressure, will lock in position until the sleeve is pulled. Other features: a tight seal when the line is pulled apart, little flow restriction when connected. The double-sphere valve principle is said to do away with turbulence and overheating. The company address: Roanoke, Ill.

• Availability: 10 to 14 days.



### Carbonless Copier

Typewritten copies are made without carbon paper by an attachment developed by Ribbonwriter Corp. of America, Dania, Fla. Using a ribbon similar to an ordinary typewriter ribbon, the Rib-N-Rite attachment will fit any standard typewriter carriage.

For an original and two copies, the Rib-N-Rite ribbon travels between the second and third sheets on an extra set of reels. The regular typewriter ribbon prints the original; the Rib-N-Rite prints the two copies. Actually, the print on the first onionskin is on the back of the sheet, the company says, makes it fully legible.

Operation of the extra ribbon is com-

# A Distributor serves you Best



Fairway water hose is a distinctive, long-life water carrier for many uses.

It is flexible, easy to handle, and will not kink. Premium braided construction combines strength and flexibility beyond service requirements.

The tough cover resists abrasion, chipping, and sun checking.

## YOU PAY NOTHING TO HAVE A REPUBLIC RUBBER DISTRIBUTOR'S TRAINED STAFF EASE YOUR PURCHASING ROUTINE



A quality of product uniformly good and capable of delivering service results that should reasonably be expected.

A QUARTER CENTURY OF PROGRESS

Your purchasing is really "modernized" when you take full advantage of a Republic Rubber Distributor's facilities. Envision the time and trouble you save by having ONE reliable source of information and supply — ONE personal contact — ONE telephone inquiry — ONE purchase order — ONE invoice and ONE check rather than multiple contacts and extra bookkeeping. Your Republic Rubber Distributor is a dependable source for information regarding industrial supplies. Why not save by simplifying your buying habits now?

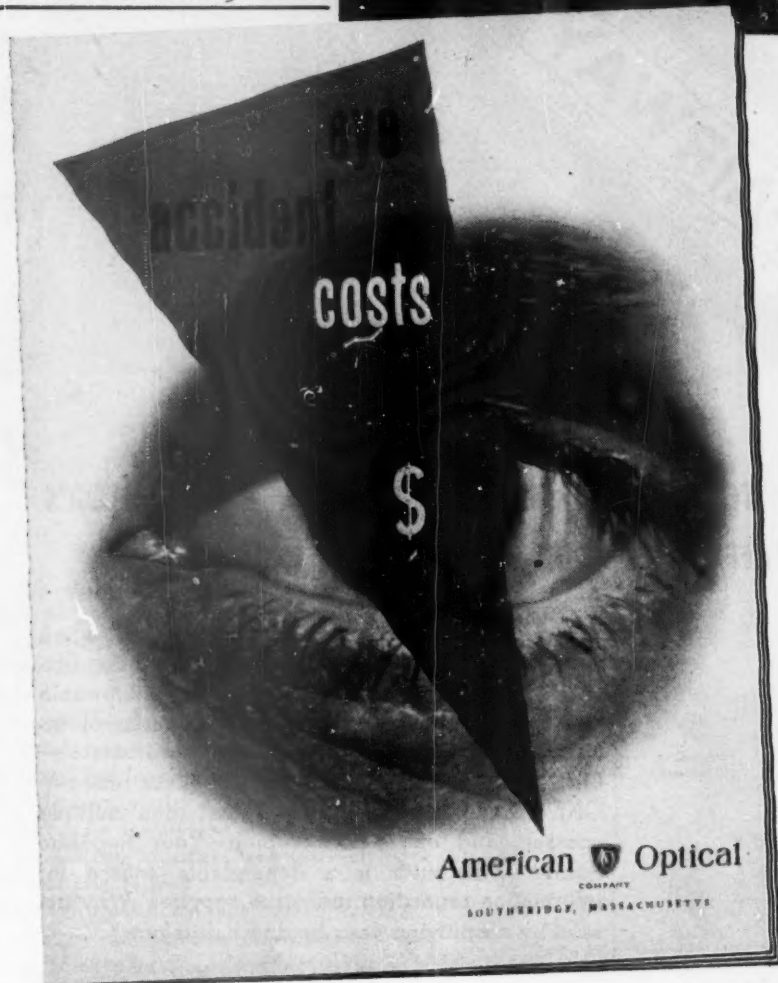
MECHANICAL RUBBER GOODS BY  
**REPUBLIC RUBBER  
DIVISION**



REPUBLIC RUBBER DIVISION  
LEE RUBBER & TIRE CORPORATION . . . YOUNGSTOWN, OHIO  
Lee Deluxe Tires & Tubes, Conshohocken, Pa.



**In these Days  
of Rising Costs  
Eye Accidents  
Hurt . . . in your  
Pocketbook,\* too.**



**Write for this Booklet which tells how they  
can be prevented for 1/2 a cent per day!**

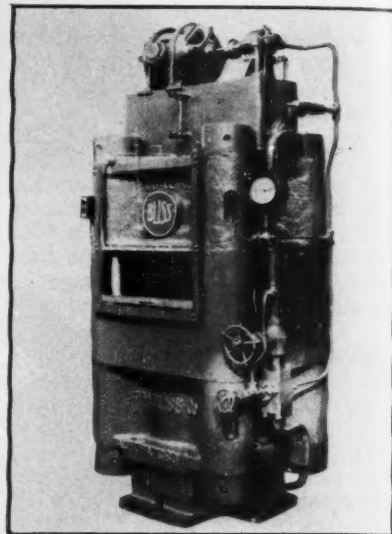
\*Industrial Eye Accident Costs up 78½% since 1939. (A recent study of 31 eye injuries in one plant showed costs per accident ranging from \$2.90 to \$215.15, average \$16.29.)

Write Dept. B for your copy of "Eye Accident Costs."



pletely automatic. With another set of reels, you can make an original and four copies. Copies come out without smudges, look very much like the typed original.

• Availability: Operations will start at the Dania plant by July 1; deliveries begin in October.



#### **Hobbing Press**

For manufacturers who need a number of die reproductions for multiple stamping work, E. W. Bliss Co. has a new die-hobbing press. The press makes the reproductions by forcing a master punch into metal blocks. The cavities left in the blocks duplicate the contours of the punch.

Working at a pressing speed of 2 in. a min., the hydraulic unit has a pressure capacity of 500 tons. The press frame is made of two steel castings rigidly mounted on four heavy steel tie-rods. Safety shields are designed for all openings to the die space. Hand-wheel valves control the work from the front of the press. The company address: 450 Amsterdam Ave., Detroit 2.

• Availability: 5 months.

#### **P. S.**

Electric carpet sweeper works with a "whisk-broom" stroke. Brush moves at 1,750 sweeps per min. Adjustable knob at the back raises or lowers the brush to clean naps of any depth. Hemp & Co. Manufacturers, 2100 Murray St., Macomb, Ill., calls its new unit the Electro-Sweep.

Computer for figuring hours worked is a sort of slide rule. It is made by The Hourmaster, P. O. Box 533, Westfield, N. J. To use it, start and finish times are matched on the rule with an automatic time-out scale. This gives a reading that shows net hours worked—with minutes in decimals.

You, too, can cut costs up to

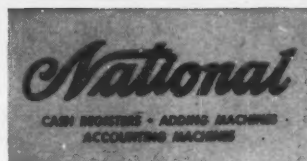
30% with



## National Mechanized Accounting!

In hundreds of the country's leading banks, this remarkable National Multiple-Purpose Accounting Machine cuts figure-costs and speeds accounting production. But banks are not the only concerns to profit by the *mechanization* of their accounting. Businesses of every type are reporting savings

of up to 30% after *mechanizing* their accounting with Nationals. Savings which often paid for the whole National installation in the first year. No wonder so many businesses are turning to National! Have your local National representative show you what you can gain by *mechanizing* your accounting.



THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO



## **PRESSTITE Can Engineer A Custom Made Sealer To Solve Your Sealing Problem, Too**

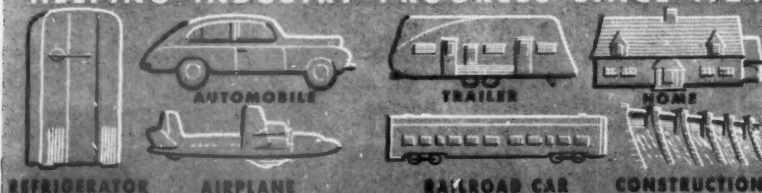
Whether your sealing problem is one of sealing out water, moisture, air, dust, or preventing rust and corrosion, Presstite Engineers can develop a sealing compound to meet your requirements. Since 1924, Presstite has been serving leading automobile, refrigerator, railroad and airplane manufacturers.

Tell us your sealing problem. A request on your letterhead will bring you samples or recommendations. Write today.



The Boeing XB-47 Stratojet, the U. S. Air Force's newest bomber, zooms skyward under the impetus of 42,000 pounds of thrust. Presstite "Engineered" Sealing Compounds have been developed to meet the rigid requirements for sealing the pressurized compartments of this new bomber.

### **HELPING INDUSTRY PROGRESS SINCE 1924**



**PRESSTITE ENGINEERING COMPANY**

3936 Chouteau Ave.  
St. Louis 10, Mo.

## **READERS REPORT:**

### **Orchids for Victor O. Schwab**

Sirs:

We came in for a bouquet of undeserved orchids in a recent issue when you gave us credit for being the author of the spirited bit of poetry titled "Tell Me Quick and Tell Me True" [BW—May 29, 48, p101].

I hasten to inform you that we are not the author—wish we were—and that we do not make a business of plagiarism.

Therefore, in the interest of peace with the as-yet-unknown author of "Tell Me Quick and Tell Me True," please set the record straight.

Thanks, nonetheless.

R. T. NIMMONS

HAWAII EMPLOYERS COUNCIL,  
HONOLULU, HAWAII

• Both Business Week and the Hawaii Employers Council belong in the doggerel house for not crediting Victor O. Schwab, of the advertising firm of Schwab & Beatty, Inc., for the authorship of "TMQ & TMT". Laureate Schwab's immortal verse was published in the March, 1946, Advertising & Selling.

### **It's Associated**

Sirs:

From your description of the new plant for spinning worsted yarn at Gastonia, N. C. [BW—May 22, 48, p53], you were apparently referring to the plant of this company, Associated Spinners, Inc. But, unfortunately, you called us American Spinners, Inc. While being called American certainly is nothing to be ashamed of, for business reasons we would prefer if your readers knew us by our right name.

MILTON E. TAGER

PRESIDENT,  
ASSOCIATED SPINNERS, INC.,  
NEW YORK, N. Y.

• We did indeed mean Associated Spinners, Inc., and we regret the slip.

### **Birmingham vs. Atlanta**

Sirs:

Your article on Rich's department store of Atlanta [BW—Apr. 24, 48, p88] says that "Atlanta is the largest city east of New Orleans and south of Louisville, Ky. Birmingham, which is the nearest city of comparable size—and it's 165 miles away—has a metropolitan-area population of 502,000 to Atlanta's 565,000."

Your 502,000 figure for Birmingham



apparently comes direct from the census report P-21 No. 32, taken in 1947 by the U. S. Census Bureau.

I should like to point out that the same U. S. Census Bureau took a census of Atlanta at the same time, Report P-21 No. 6. This report gives the population for Atlanta as 498,000.

How did you find for Atlanta this 67,000 population that the U. S. Census Bureau couldn't find?

BERNARD D. FELD, JR.

NEWS AND AGE-HERALD,  
BIRMINGHAM, ALA.

Sirs:

... You evidently got your Atlanta figures from some other source than the April, 1947, census. However, if you were going to make a comparison you should have used the data for both cities from the same government records. As a matter of fact, not directly germane to the question, Birmingham had a gain in population for the period 1940-1947 of 23% or 94,000, while Atlanta showed a gain of 13% or 56,000 during the same period.

N. B. McLAURINE

GREENVILLE, S. C.

• We slipped. The latest Bureau of Census figures for the Birmingham metropolitan area show a population of 502,398; for Atlanta the figure is 498,109.

On the other hand, depending somewhat on how you define a metropolitan area, there are other figures to indicate the metropolitan Atlanta population now is 635,000; that of Birmingham is 525,000. These figures are sometimes used by the Dept. of Commerce. We rechecked them and used them in one of our Reports to Executives last year entitled "The Southeast" [BW-Oct.25 '47,p73].

## Engineering Award Figures

Sirs:

On your statistical page [13] you carry engineering awards. What do these comprise?

We are in the lumber and building material business. We wonder if these are closely related to building or strictly engineering contracts such as utilities, etc.

MAURICE E. SHURTLEFF

PRESIDENT,  
SHURTLEFF & CO.,  
ELGIN, ILL.

• Our figures on engineering construction awards include heavy construction contracts, such as those for waterworks, sewerage, bridges, streets and roads, earthwork and drainage, and public, industrial, and commercial buildings of all kinds.

BUSINESS WEEK • June 26, 1948



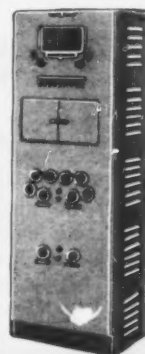
How much do you pay per week  
FOR  
MISSING  
PERSONS?

## Use a STROMBERG-CARLSON Sound System to Find Them Instantly!

There's no place in your budget for the time wasted throughout your plant or office by unofficial messengers looking for executives. The figure is considerably larger even than you realize, certainly enough to pay for a Stromberg-Carlson Natural Voice Sound System in a short time.

A Stromberg-Carlson Sound System can do your footwork for you, for less, and do a better job in the bargain.

Whether your requirements can be handled by a single microphone and one or two speakers... by an intercommunicating system... a telephone system... or whether you need a multispeaker system with record turntables and radio, there is Stromberg-Carlson *natural voice* equipment to meet your exact needs. Consult your classified telephone directory for name of your distributor or write for descriptive literature to Dept. BW 6, Stromberg-Carlson Company, Rochester 3, N. Y.



SS-751  
Control Cabinet

STROMBERG-CARLSON  
NATURAL VOICE SOUND SYSTEMS



# MARKETING

## Auto, Truck Prices Go Up

Six manufacturers have followed Ford in making adjustments. Others probably will follow suit on 1949 models. Discounts on fleet sales have been dropped by Ford and General Motors.

There wasn't any news this week in the fact that auto and truck prices were going up. Everybody had known they would. Wage hikes and retooling costs made that inevitable. But the question remained: How much would the hike be?

Now there's a tentative answer: between 5% and 10%.

• **Seven So Far**—Seven automakers have raised prices thus far. Ford was the first. It tacked from \$75 to \$125 more onto the prices of its 1949 models, an average of 8.7% over 1948 (BW—Jun. 12'48, p. 32). What's more, dealers are not cut into the boost.

The Ford advance was on new models. Last week six other manufacturers did some boosting of their own, but on the same cars they have been building. Packard, Nash, Studebaker, Chrysler, and Hudson advanced prices. So did the two truck-making divisions of General Motors.

• **More to Come**—Will the rest of the automotive industry follow the trend?

The answer is yes—with some qualifications. Willys-Overland, for instance, last week said it would hold the price line—despite the 13¢ pay increase. The new wage contracts have boosted Willys costs about \$1.7-million a year.

Nevertheless, Detroit thinks that last week's hikes will be followed by more. Companies which make major changes on 1949 models will certainly raise prices on them, thanks to the high cost of retooling. In between, other price advances are likely. One indication: In expressing its hopes to maintain passenger car prices unchanged, G. M. qualified itself by saying that no "immediate" change was contemplated.

• **Headache for Business**—If these increases follow the pattern already set, they will affect all types of vehicle buyers. For businessmen, there is a special, less-publicized, jolt: The automakers are abolishing fleet discounts.

• **Scoreboard**—Here is the scoreboard on price increases so far:

**Ford.** Ford's base price model (the six-cylinder business coupe) now comes to about \$1,380, delivered at Detroit. At the same time the company left the door open for further price adjustments in July when: (1) Cost studies have been made on volume production, and

(2) the United Auto Workers (C.I.O.) has presented its demands. Ford began talks with the union last week (BW—Jun. 19'48, p. 106).

Detroit is now looking at Ford Motor Co. of Canada, Ltd.—and wondering. Last week Ford of Canada announced price advances on its 1949 models about double those on the U. S. versions.

Although the company didn't explain, Detroit had two quick angles:

(1) Since there are limitations on auto production in Canada (BW—Feb.

21'48, p. 113), tooling amortization has to be spread over fewer cars.

(2) Ford of Canada is now negotiating wages with the U.A.W., probably will have to pay higher wages.

**Packard.** It followed up a 13¢ pay boost by upping prices \$75 to \$200 on current models—an average of 5.7%. Packard's new Detroit factory delivered prices start at \$2,270 on the standard club sedan.

**Nash.** After boosting pay, it raised its prices \$70 to \$90 a car (an over-all average of 5%). The Kenosha factory delivered price on the two-door business coupe is now \$1,478.

**Studebaker.** Factory list prices on all passenger cars and trucks are up \$65 to \$115 (5.5% over current prices).

**Chrysler.** New factory delivered prices for Chrysler's base-price cars: Plymouth, \$1,340; Chrysler, \$1,895; De Soto, \$1,769; Dodge, \$1,575.

**Hudson.** Its increases range from \$93 to \$153, or from 5% to 7% over current prices. Its base price car (the Super Six three passenger coupe) now

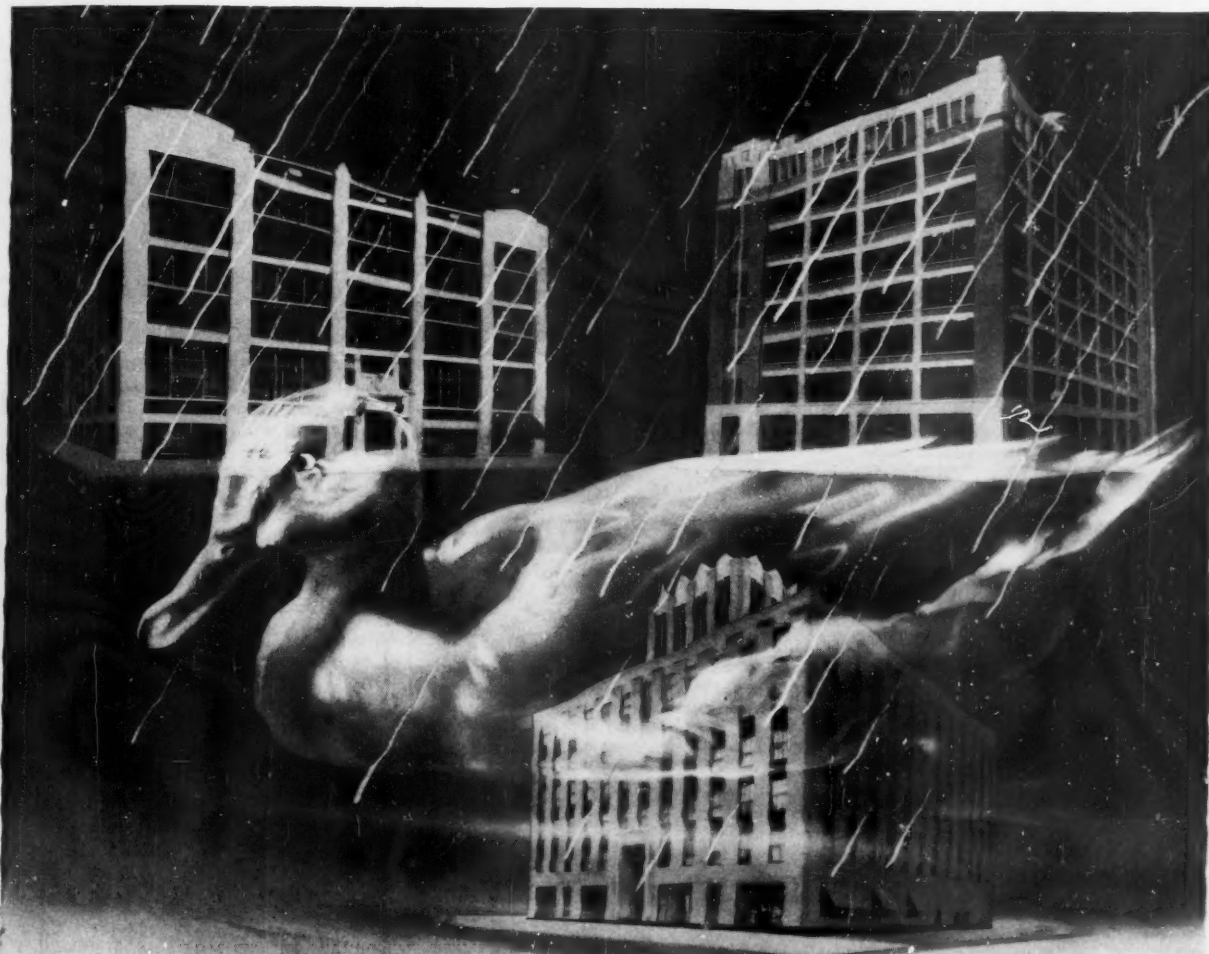


## Columbia Making Long-Playing Records

Columbia Records, Inc., says that this master-disc machine will revolutionize the home record industry. It will turn out a whole symphony on one 12-in., Long-Playing Microgroove platter. Here Dr. Peter Goldmark, director of research for C.B.S. (the parent company) looks over one step of the process with William Bachman, Columbia Records' research director.

Like radio transcription discs, the new records turn at 33 1/3 rpm., instead of the usual 78-rpm. Both Philco Corp. and Magnavox Co. will equip all their new radio-phonographs with two-speed players. And Philco will put out a special attachment (\$29.95) for existing models. A Microgroove 12-in. Masterworks record costs \$4.85—more than present discs, but less than an album.

**YOUR BUILDINGS SHOULD SHED RAIN**  
*— Like water off a duck's back!*



A bad storm spells danger to unprotected walls and contents. Your structures should be protected by Waterfoil — the raincoat for buildings. Waterfoil consists of irreversible inorganic gels which harden to bond chemically and physically to concrete, brick or stucco and help prevent rusting of re-enforcing bars, spalling or disintegration. Save the costly buildings you now own. Write for important literature on protecting your property investments.



**A. C. HORN COMPANY, INC.**

manufacturers of materials for  
building maintenance and construction

**WATERFOIL**

THE UNIQUE TREATMENT FOR EXTERIOR MASONRY SURFACES

10th STREET & 44th AVENUE, LONG ISLAND CITY 1, NEW YORK • HOUSTON • CHICAGO • SAN FRANCISCO • TORONTO



# Setting the Pace to Tomorrow!



## FOR RESULTS IN RESEARCH

... count on Martin! The Navy's Martin Mercator (above) is a development of Martin research in jet propulsion. Other projects include rocketry, plastics, television and supersonic speeds. When you look to the future, look to Martin!

## FLEXIBLE FUEL TANK

... the Martin Mareng cell ... fits in wing like a football bladder. Manufactured under license by U. S. Rubber, Mareng cells increase dependability, reduce maintenance of Martin 2-0-2 airliners. From them, Martin developed America's first self-sealing fuel tanks.



## AMONG THE ADVANTAGES

... of the Martin 2-0-2 airliner is the tricycle landing gear, which keeps plane level on ground, ends walking "uphill." And thanks to the 2-0-2's wide center of gravity range, passengers may sit wherever they wish, loading problems are ended. Count on Martin engineering for the big advances in tomorrow's planes!

## MIGHTY MISSILE

... is the Navy's Martin-built Neptune-class rocket. These rockets will reach speeds of 8,500 ft. per second—will soar 235 miles into the ionosphere, nearly twice as high as the V-2. The President's Air Policy Commission recommends intensified research and development in this field.

## AN INTERNATIONAL INSTITUTION

**MANUFACTURERS OF:** Marvinol resins (Martin Chemicals Division) • Martin 2-0-2 airliners • Advanced military aircraft • Aerial gun turrets.  
**DEVELOPERS OF:** Rotary wing aircraft (Martin Rotawings Division) • Mareng fuel tanks (licensed to U. S. Rubber Co.) • Honeycomb construction material (licensed to U. S. Plywood Corp.) • Stratovision aerial re-broadcasting (in conjunction with Westinghouse Electric Corp.)  
**LEADERS IN RESEARCH** to guard the peace and build better living in many far-reaching fields.

## GO PLACES . . . FAST!

Real careers are now open in aviation. Electronics, rocketry, meteorology, photography . . . these are just some of the fields open to forward-looking young men. Ask at your Air Force, Navy or Marine recruiting office.



## TOUGH OLD EAGLE!

From 1918 until the mid-twenties, this Martin "MB-2" bomber was standard with the Army. Using these planes, in 1921 General "Billy" Mitchell sank the captured German battleship "Ostfriesland" to prove, prophetically, the devastating potential of airpower. Great in its day, it pointed the way to today's and tomorrow's Martin aircraft.



## PAMPERED PASSENGERS

... are the rule on luxurious Martin 2-0-2 airliners. Advanced soundproofing, warm-wall heating, adjustable seats with built-in pillows, large non-fogging windows—it's no wonder air travelers prefer the Martin 2-0-2! The Glenn L. Martin Co., Baltimore 3, Md.

# Martin

## AIRCRAFT

Builders of Dependable Aircraft Since 1909

Air Power to Save the Peace  
Air Transport to Serve It

has a factory delivered price in Detroit of about \$1,990.

**General Motors.** GMC truck chassis up to 20 tons will cost from \$10 to \$110 more. Chevrolet truck chassis from \$45 to \$95 more. Prices of cabs and standardized commercial bodies have also been pushed up.

In some cases, Detroit's price increases more than cover wages. Reason: Automakers are anticipating a wave of higher prices from suppliers.

• **Fleet Discounts**—General Motors led the way in cutting out discounts on fleet sales; Ford followed along shortly.

Fleet owners can still make agreements for preferential delivery of fleet orders. But the discounts—up to 3% on purchases of 20 units or more—are out.

Ford and G. M. also tightened up fleet contracts in other respects. Henceforth, fleet purchases will be solely on company accounts. This will end the practice of letting employees buy cars for personal use. Many of these purchases have ended up in used-car lots at above-list prices.

## SETTING CAR PRICES

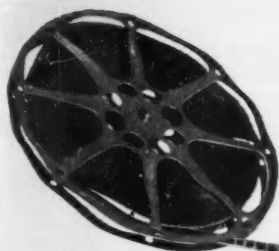
Prices in the auto and truck business are a tricky thing—because there are so many classifications. Here's a brief Baedeker:

**Factory list price.** This is the basic, stripped-down price the auto companies give the public. It includes (1) factory price, and (2) dealer margin. When price advances are made, they are tacked on at this level. Also, price percentage changes refer to factory list.

**Factory delivered price.** This one gets a little closer to what you actually pay. It is the factory list price plus the federal excise tax. Some companies add a few other charges—all minor—at this level.

**Retail delivered price.** This is what you really pay. It is factory delivered price plus (1) dealer's makeready charge—standard with all dealers of the same company, and consisting of washing, gassing, conditioning, and other service charges; (2) freight to point of sale; (3) state and local taxes; and (4) license and title charges.

Since retail delivered prices vary somewhat throughout the U. S., Business Week uses the "factory delivered price" as the best over-all indicator.

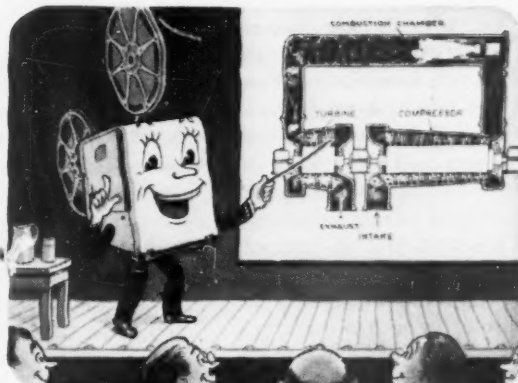


**WHAT WON'T  
THEY DO  
NEXT WITH**

*Business Films!*

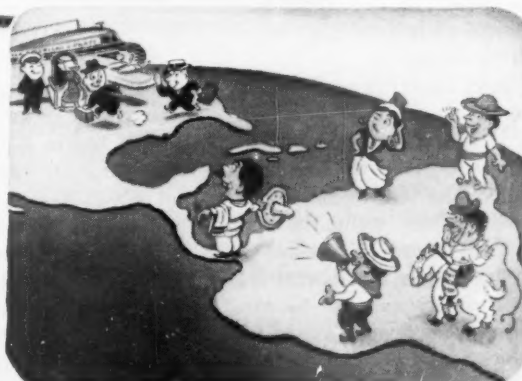


**TRAINEES LEARN FASTER** and show more interest when sound motion pictures supplement ordinary educational methods, *The Dow Chemical Company* has found. The Dow report is based upon broad experience in training employees for the firm's power, maintenance, machining, and other departments. Dow educational executives praise their B & H Filmosound projectors for performance, ruggedness, and easy operation.

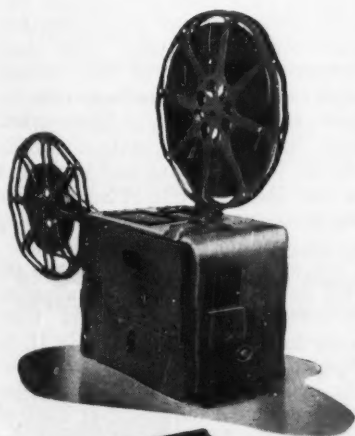


**FORCEFUL PUBLIC RELATIONS SPEAKERS** for *Allis-Chalmers Manufacturing Company* are the Filmosound projectors and sound films which report the firm's technical developments at press conferences and to engineering and other interested groups. A film on the gas turbine, for example, was previewed by 100 editors and then shown to more than 100,000 people at 1300 meetings in only 7 months.

**YOUR BUSINESS IS DIFFERENT**, but the odds are 10 to 1 that you, too, have a job which movies could do better, faster, more economically, more profitably. Capable film producers are ready to help you weigh the possibilities. Write us for their names.



**DISTANT LANDS BECKON** to more than 8,000,000 travel prospects annually through the persuasive medium of *Pan American World Airways* motion pictures. After 13 years of using movies in sales work and for personnel training, Pan American has more than 50 Filmosounds; praises these projectors for their durability and reliability; commends Bell & Howell for speed and efficiency when service is necessary.



**BELL & HOWELL COMPANY**, 7116 McCormick Road, Chicago 45. Branches in New York, Hollywood, Washington, D. C., and London.

**FINE PROJECTORS** are a "must" if your film is to be fully successful. And the finest 16mm sound film projector, most commercial film users agree, is the . . .

*Filmosound*

Precision-Made by

**Bell & Howell**

Since 1907 the Largest Manufacturer of Professional Motion Picture Equipment for Hollywood and the World

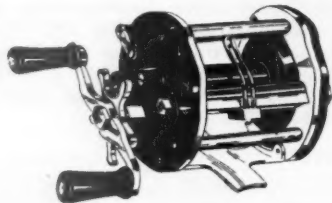
## BUSINESS IN MOTION

### *To our Colleagues in American Business...*

Sport is fun. It is also big business, because we Americans spend many millions each year on equipment, ranging from the two-for-a-penny hooks bought by small fry to the \$50,000 (and up) boats used for cruising and fishing; from bats and balls and gloves to guns, outboard motors, private airplanes. Thus sport reaches deep into American industry, to such an extent that companies you would not normally think of in such a connection are indirect suppliers to sportsmen. This is especially true of the metal industries. Revere Metals, such as copper, brass, bronze, nickel silver, are used in marine engines, marine hardware, cartridges, fishing reels, and so on, all without the user realizing it. You might ask why he should, and be quite right. All he wants is really good sporting equipment.

For example, fishermen who own salt water reels of a famous and popular make, selling for as much as \$100, look to the reel to help them make their catches, while the reel maker looks to Revere as a source of supply of fine metals, metals that are uniform in quality and can be machined with the accuracy required for reliable operation in service. Corrosion resistance under salt water conditions is also essential. Recently Revere looked over its order books and discovered that during the past three years this reel manufacturer had bought the following: Brass Strip, 11 different specifications, for use in making 12

parts; Brass Rod, 14 different items, for 13 parts; Phosphor Bronze Strip, 6 different items, for one part; Brass Tube, one item, for one part. Revere is not the only source from which this maker buys materials, which makes this list all the more impressive and satisfying. These items were specified with great care, in their various gauges, tempers and alloys, to achieve manufacturing economy as well as accuracy, and to protect the reputation of the reel, which is high, due to the use of quality materials and employment of high skill in manufacture.



In most cases, of course, the Revere Metals have utilitarian end uses. When we find them going into fine sports equipment we have an added satisfaction, heightened by the fact that the manufacturers are as meticulous in purchasing as are any other group of customers. After all, we also like to hunt and fish, and go in for the other sports too. This is true not only of Revere, but of all suppliers to industry. They too enjoy sports in leisure hours, when not busy making their good materials and helping customers select and fabricate them properly into fine products. So, it is Revere's suggestion that no matter what it is you make — fishing reels or furniture, bait boxes or bedding, it will pay you handsomely to give your suppliers an opportunity to turn their brains to your profit by permitting them to collaborate with you on your problems.

**REVERE COPPER AND BRASS INCORPORATED**  
Founded by Paul Revere in 1801

☆☆☆

Executive Offices:  
230 Park Avenue, New York 17, N. Y.



WITH STAINPROOF WALLPAPER, Junior's mother and the paper maker are . . .

## Set For Cleanup

United Wallpaper, Inc., tackles industry sales slump with washable Varlar, predicts gains from other new lines.

Your youngster's colorful marks on the living-room wallpaper needn't be a permanent blight. Not if the paper is United Wallpaper's new stainproof "Varlar." The company hopes that Varlar will make a more lasting mark—one that will go deep enough to check the current sales slump in the wallpaper industry.

• **Sales Slip**—While supplies of most grades of paper and paper products just this spring came close to balancing record demand, wallpaper production has already tipped the scales. Last year, wallpaper makers bettered their normal annual output of 400-million rolls by almost 40-million rolls. This record output has filled up dealers' stocks, which at the war's end had sunk to a new low. Result: a pile of heavy inventories in jobbers' hands, and slackening sales by manufacturers last winter.

Take a look at the sales figures reported last week by United Wallpaper; they reflect the quick change from scarcity to plenty. Biggest single U. S. wallpaper manufacturer, United normally makes about 25% of the industry's total annual output. Net sales of United and its domestic subsidiaries for the nine months ended Mar. 31, 1948, were \$9.6-million; this was over \$6-million short of the company's \$15.8-million sales in the same period last year. Sales for the full fiscal year ended June 30, 1947, had totaled \$22.7-million.



# Your biggest market— where TOWN and FARM meet!

Everybody talks about the big farm income—not everybody does enough about it. Everybody knows about the big farm market . . . how many really know where it is, how big it is, WHAT IT MEANS TO THE NATION'S PROSPERITY—AND YOURS?

**There is just one place to find the full, sensational answer . . . look in the towns where the farmer spends his money.**

There you'll see one-half of the nation, living in centers of twenty-five thousand and less, and on their feeder farms. There you'll see more than half your own best dealers . . . groceries, drug stores, hardware, auto, gas and electrical merchants. There you'll see business humming—as never before.

**OUR GRASS ROOTS ECONOMY IS WAKING UP AND CATCHING UP . . . EMERGING AS THE GREAT NEW MARKET OPPORTUNITY OF THE PRESENT DAY.**

For money has come to Main Street in the last seven years, just as it has come to the farmers. And 20 MILLION FAMILIES BUY ON MAIN STREET—more than half the population of the country. 20 million families bank on Main Street. And thousands of new processing plants and factories witness the decentralization of industry into these smaller, saner, more productive centers.

**What does that mean to your Main Street dealers?**

Retailing is the biggest business on Main Street. Today Main Street merchants are thriving on farm families whose bumper incomes are matched by their pent-up desire for better living. And don't forget, farming, America's biggest business, spends billions every year for farm machinery and supplies—nearly all of it at retail.

**Farmers are not the only ones who are creating wealth among the families on Main Street. Most of the people who shop there live there. Millions of them are employed by Main Street industries,**

**and more and more industries are moving to Main Street all the time. Payrolls are larger—pay-checks fatter.**

If you are aware of the far reaching scope of these changes since 1943, then you should be aware of other, equally significant changes. You should know that revitalized, vigorously edited, splendidly printed PATHFINDER has become the favorite news magazine of market town merchants, professional men, wage earners. That its circulation has grown from 400,000 to over 1,000,000 in three years, making it the second largest news magazine. And that its advertising revenue reflects this trend with more than a million dollar increase.

You should know that more of the nation's prosperous farm families buy FARM JOURNAL than buy any other magazine—enough to give it the 4th largest magazine audience in America and an increase from 2 million to 8 million in advertising revenue since 1942. **You know that these two publications together are pouring 4,800,000 copies a month into this closely integrated, deeply united town-and-farm economy.**

More and more leading businesses are learning these facts. The radical change in the market value of farm and Main Street families demands an equally radical change in magazine advertising thinking, if selling messages are to be distributed among better customers of better retailers in proportion to their number and buying power.

No longer can you be content with putting 211 selling such messages against a good outlet in the city and only 141 against an equally good outlet in a Main Street town. You'll need to expand and shift to meet these new customers BOTH on Main Street and the farm. Our magazines are one way—the biggest, and, we naturally think, the best way. But even we don't get all of them. To do the opportunity justice, you'll want to take us and add more, too!



## Farm Journal

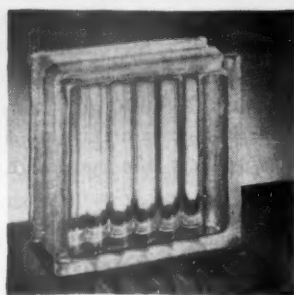
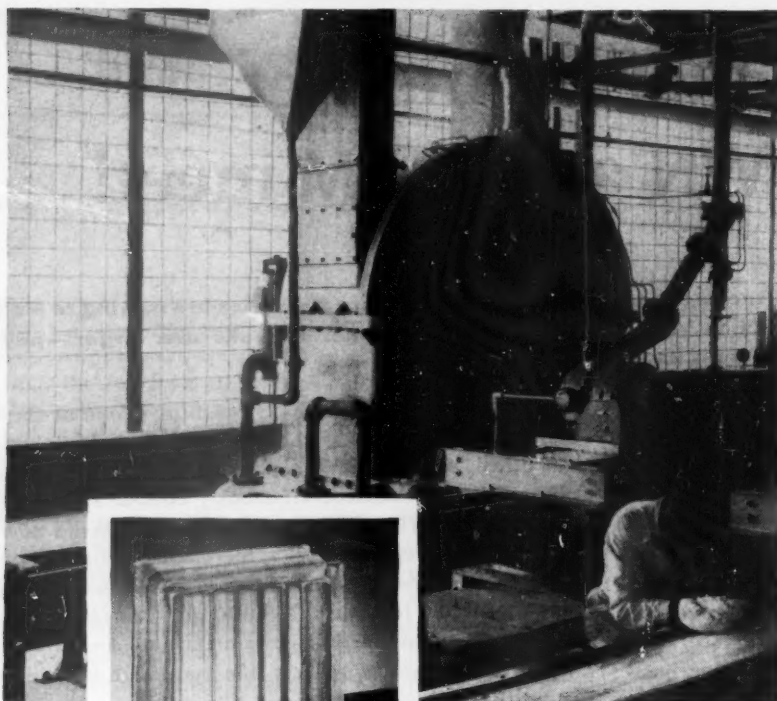
**BIGGEST in the Country—with  
2,700,000 subscriber-families**



## Pathfinder

**America's 2nd Largest News Magazine.  
1st on Main Street with 1,050,000 families**

**FARM JOURNAL, INC., Graham Patterson, President**



## Better lighting at lower cost is one way PC Glass Blocks pay for themselves

● PC Glass Blocks distribute an ample supply of diffused daylight over large workrooms. They can direct light to areas far from lighting panels, thus making additional floor space useable and reducing the cost of artificial lighting. Through better light diffusion they give employees greater eye-comfort.

In addition, PC Glass Blocks possess insulation values that reduce heating and air-conditioning costs. They dampen disturbing sounds and exclude distracting outdoor views. And panels of PC Glass Blocks can be kept clean easily and economically. These are some of the ways installations of PC Glass Blocks pay for themselves over a period of years.

Our technical staff will be glad to discuss your lighting problems, to show you how you can use PC Glass Blocks to the best advantage.

Meanwhile, why not send for our illustrated, descriptive booklet? It shows a wide variety of installations of PC Glass Blocks in industrial plants and offices. Just mail the coupon and we shall be glad to send you a free copy. Pittsburgh Corning Corporation also makes PC Foamglas Insulation.



### GLASS BLOCKS

Distributed by  
PITTSBURGH PLATE GLASS COMPANY  
by W. P. Fuller & Co. on the Pacific Coast  
and by Hobbs Glass Ltd. in Canada

#### PC GLASS BLOCKS

... the mark of a modern building  
FOR ADDITIONAL INFORMATION SEE OUR INSERTS IN SWEET'S CATALOGS.

Pittsburgh Corning Corporation  
Room 632-B, 632 Duquesne Way  
Pittsburgh 22, Pa.

Please send along my free copy of your booklet on the use of PC Glass Blocks in Industrial Buildings. It is understood that I incur no obligation.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

lion, up \$8.3-million from 1946 sales.

● **No Permanent Blot**—United executives aren't downhearted. They expect the sales slump to end soon. Reasons: Dealers' inventories are shrinking rapidly. The company feels sure that the style trend which began in 1938-39 toward patterned walls will keep demand for wallpaper high. And, in spite of war restrictions that held use of raw paper stock for wallpaper to 60% of 1941-42 consumption, United sales had risen steadily. Prewar peak sales totaled \$6-million (1939).

The housing situation works two ways for the wallpaper maker: The "landlord-tenant" market, from annual redecoration of rented housing, has all but vanished; in prewar days it accounted for around 23% of total wallpaper sales. But increased use of wallpaper in new housing, formerly only a small fraction of the market, more than offset the lost redecoration sales.

To help get wallpaper sales back on the upgrade, United is introducing three new lines this summer.

● **Washable Varlar**—Varlar is a practically stainproof paper. Soap and water will wash off almost any kind of blemish. Varlar is made by a secret thermoplastic process. Nine years of research went into it. United announced it two years ago (BW-Jan.12'46,p68); now you can buy it in 93 patterns at many retail wall paper stores. United officials say their Varlar is quite different from other plastic-coated or laminated paper; they describe Varlar as a fusion of colors, paper and plastic resins that won't chip or peel. In a test installation in a Chicago theater, United claims that Varlar has withstood weekly washings for three years; formerly the theater had to paint three times a year.

Varlar sells in packages, not rolls. Price 10¢ to 17½¢ a sq. ft. in 100-sq. ft.



UNITED'S PRESIDENT William H. Yates: an aggressive merchandiser



## "SLICK CHICK"

A "slick chick" in one minute is the boast of a new poultry-plucking device. The motor-driven defeatherer handles 300 to 500 birds per day and does not bruise or tear the tenderest flesh. And best of all, it delivers the feathers neatly packaged in its receiving bag.

A Wagner totally-enclosed motor was chosen to power this chicken stripper because it is not only dust-proof, fume-proof and moisture-proof, but feather-proof as well, for long dependable service at this unusual application.

In industry, in stores, in homes, *wherever* an electric motor is used, a Wagner Motor offers maximum service at minimum cost. Wagner Motors have been known for efficiency and dependability for over 55 years.

Should you need electric motors, or any of the products made by Wagner, consult the nearest of our 29 branch offices or write to Wagner Electric Corporation, 6460 Plymouth Ave., St. Louis 14, Mo., U. S. A.



**Wagner**  
Electric Corporation  
ESTD 1891

**ELECTRIC MOTORS • TRANSFORMERS  
INDUSTRIAL BRAKES  
AUTOMOTIVE PRODUCTS**





is a BW advertiser is a BW advertiser



THE PENNSYLVANIA RAILROAD tells industry about its freight facilities, and the advantages of locating along the Pennsylvania. For 13 years the company has used the pages of *Business Week* to tell its story to Management-men.

These Management-men, who comprise the vast bulk of BW readers, are actively interested in all new developments that facilitate the economical handling of freight shipments. It is their responsibility to make decisions on plant location . . . *final* decisions.

For this reason, *Business Week* is a good *buy* for the Pennsy . . . its advertising dollars invested in BW "work harder," produce more, because BW offers a minimum of waste circulation. Per advertising dollar, *Business Week* reaches more Management-men than any other general business or newsweekly magazine.

**WHEREVER YOU FIND IT, YOU FIND  
A MANAGEMENT-MAN . . . WELL INFORMED**

vertiser is a BW advertiser is a BW advertis



**10 Years or More in BW**  
(Freight Advertisers)

- Association of American Railroads
- American Trucking Association, Inc.
- Chesapeake & Ohio R.R.
- Chicago, Burlington & Quincy R.R.
- Great Northern Railway
- New York Central System
- Norfolk & Western Railway
- Northern Pacific Railway
- Pennsylvania Railroad
- Southern Railway System
- Union-Pacific Railroad
- United Airlines

**BW PULLS THE FREIGHT!**

During 1947, Business Week carried 89 pages of advertising in the Freight classification...\*almost twice as much as the average of the other six leading general business and newsweek-ly magazines.

\*Based on Publishers' Information Bureau analysis.

**27 MILES OF NEW FREIGHT CARS**  
A SERVICE PENNSYLVANIA RAILROAD'S FOR SHIPPERS

**PENNSYLVANIA RAILROAD**  
Serving the Nation's Needs

*Whatever your building picture...*  
**CONCRETE**  
*costs less per year... lasts longer*

**W**HETHER you plan to build a home, a highway, an improvement on the farm, a hospital, an apartment house, an industrial plant or a huge dam, you will be money ahead if you build with concrete.

Portland cement concrete is an enduring construction material. It is moderate in first cost, has extra long life and such low maintenance cost that it results in **low-annual-cost**—the true measure of construction economy.

In addition to being durable and economical, concrete has the strength and stamina to make it stormproof and weatherproof, decay-proof and ratproof.

In pavements all over America its smooth-riding, light-colored, high-visibility surface attracts the most and the heaviest traffic year after year and at **low-annual-cost** to taxpayers.

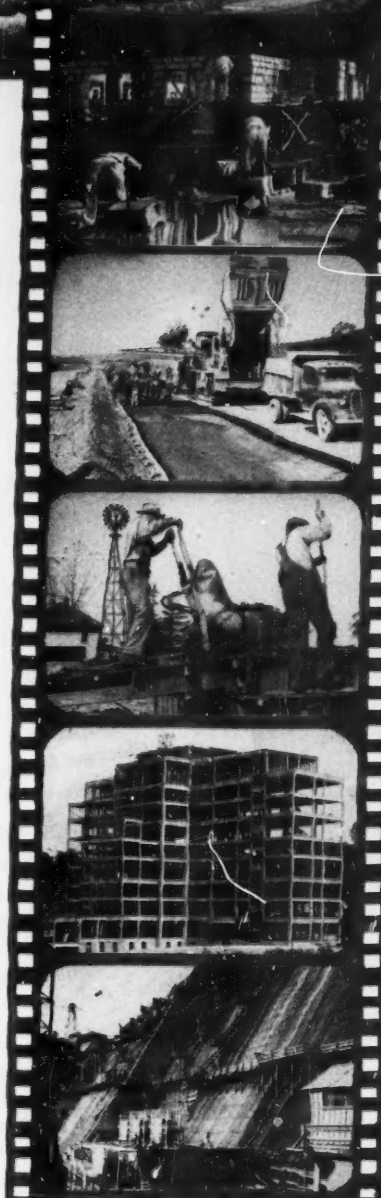
Concrete can't burn, so it is the preferred material wherever fire-safety is an important structural consideration. It can also be easily and economically molded into imposing structures of great architectural beauty.

So whatever you plan to build, choose firesafe, long-lasting, **low-annual-cost** concrete.

## PORTLAND CEMENT ASSOCIATION

Dept. 6d-12, 33 W. Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work



packages. This is equivalent to \$3.60 \$7.50 per conventional roll of wallpaper. Its big target is institutions—restaurant hotels, and theaters which have clung to paint because of its washability are expected to go for Varlar. Because it is vermin-resistant as well as stain-proof and washable, hospitals also are sales prospects. United hopes to sell \$2.5-\$3-million worth a year.

• **New Franchised Line**—Besides Varlar, United is banking on a brand new line of wallpapers—"Nancy Warren." Only franchised dealers will handle it. Each "Nancy Warren" distributor will have a defined sales territory entirely to himself. The line will be displayed in a separate book. Distributors will place the exclusive line with as many retail outlets as they need.

Big advantages United sees in the new setup. (1) more concentrated sales effort in a smaller territory, with resulting rapid turnover for the line; and (2) bigger recognition for United brands. The "Nancy Warren" papers will supplement, not supplant, United's regular lines, which will still be marketed through normal channels.

• **New Regulars**—As a third sales incentive, United is bringing out its first new line of regular wallpaper since 1946.

Both the Nancy Warren papers and new regulars will be introduced to the trade in July; retail outlets will have them in January.

• **Diversification Pays**—United is used to a policy of up-and-coming merchandising—and diversifying. That policy started back in 1941, when William H. Yates (picture, page 72) took over as president. Since then, through a wholly owned subsidiary, Trimz Company, Inc., United has launched a line of specialty paper products which now include: Trimz Ready-Pasted Borders, and Grimz Wallpapers, both made with a patented adhesive base so that amateur home decorators can hang them easily; a Ready-Pasted Cedar Closet wallpaper, impregnated with a cedar odor; Ready-Pasted DDT-treated wall and ceiling papers for kitchens and children's rooms; Trimz paper draperies, added in 1946; and Trimz rayon and cotton fabric draperies, made of a new nonwoven, felt-like fabric. These are to sell at \$1.98, to fill the price gap between paper draperies and present ready-made fabric draperies.

The specialty products are marketed through chain and variety stores.

• **Expansion**—Late last year, United put into production a new wallpaper mill at Aurora, Ill.; the company believes it's the largest in the world, with 425,000 sq. ft. of floor space, and the most modern wallpaper machinery. When the Aurora plant is going full tilt, it will have a capacity of 45-million rolls of wallpaper a year.





## TV for the Masses

Last week, as New York stores made sporadic price cuts to move their expensive television sets, Pilot Radio Corp. offered an alternate way to reach the mass market. Its answer is a low-cost (\$99.50) receiver featuring a 3-in. picture tube. No outside antenna is required, according to the company; a wire (roughly 15 ft. long) furnished with the set does the trick. Called "Candid T-V," the portable set has 21 tubes, weighs less than 15 lb., operates on alternating current.

## WALLPAPER TRADE SUED

The major part of the wallpaper industry—companies that make 85% of the industry's output—has been charged by the Justice Dept.'s antitrusters with fixing prices. The defendants: The Wallpaper Institute, New York City; Atlas Wallpaper Mills, Inc., Coal City, Ill.; Birge Co., Buffalo; J. C. Eisenhart Wall Paper Co., Hanover, Pa.; Enterprise Wall Paper Mfg. Co., South Langhorne, Pa.; Imperial Paper & Color Corp., Glens Falls, N. Y.; United Wallpaper, Inc., Chicago; and York Wall Paper Co., York, Pa.

Last week a federal grand jury in Philadelphia indicted them for violation of the Sherman act. Justice says the defendant companies got together through the institute to establish resale prices and discounts, set the discounts for obsolete patterns, exchange information on prices and costs, and make other agreements.

At the same time, the department filed a civil suit against the same defendants. It wants an injunction to prevent them from continuing the practices it says are illegal.

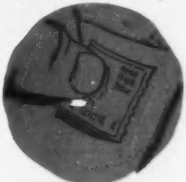
Attorney General Tom Clark says the suit "is part of the department's program to free the housing field from unlawful restraints of trade."



Tear off stamp



Moisten stamp



Place stamp



Stick stamp



Moisten flap



Seal flap

# 6 things that nobody does better—

Mailing with adhesive stamps, by hand, is tedious and time taking. Mailing with a postage meter is fast and efficient.

The meter never runs out of wanted stamp denominations. A flick of a lever provides any unit of postage needed.

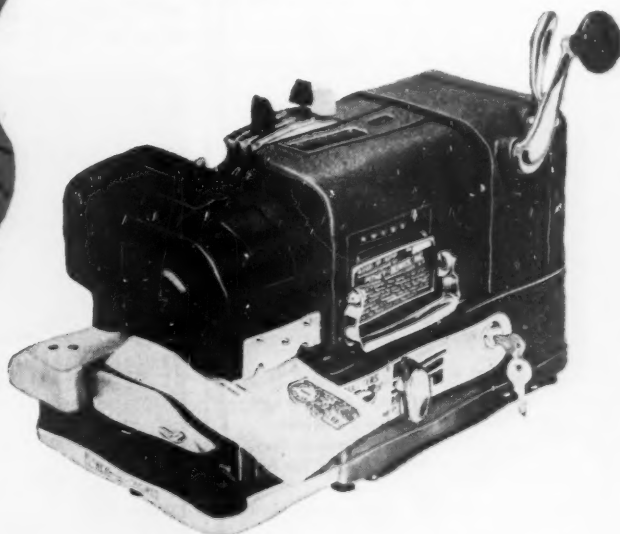
The meter *prints* directly on the envelope a dated postmark, and the exact postage needed—seals the flap at the same time.

For parcel post, the meter prints on gummed tape, delivered moist or dry, any amount of postage needed *in a single stamp*.

And a meter holds as much postage as you want . . . protects postage from damage, loss, misuse . . . keeps exact record of expenditure.

Metered mail speeds through the postoffice, too—no wait for postmarking and cancelling.

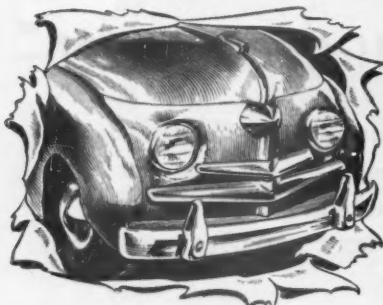
Whether your outgoing mail is much or little, there's a postage meter for your needs—a convenience in the small office, and a real postage and work saver in the big! . . . Call the nearest PB office . . . or write direct to Stamford for illustrated booklet.



## PITNEY-BOWES Postage Meter

PITNEY-BOWES, Inc., 1450 Pacific St., Stamford, Conn. • Originators of Metered Mail. Largest makers of mailing machines. Branches in 85 cities in U.S. and Canada.

## CROSLLEY NOW HAS THAT "New Look"



Here's new smartness to make you prouder than ever to drive a Crosley. Now Crosley steps out—steps up—with a newly designed front. It's the "new look"! Massive louvers and a gleaming spinner adapted from aircraft propellers. See the new Crosley today—see why every one's saying when a Crosley passes, "Crosley cars are better looking than ever."

Available in 6

smart styles—

Station Wagon:

Sedan: Converti-

ble: Panel De-

livery: Pick-up:

Sports-Utility.

Priced at several hundred dollars under comparable models, operate for about half as much. All are roomy, easy-driving, give 35 to 50 miles per gallon. Powered by the revolutionary 4 cylinder Crosley COBRA engine.

**CROSLLEY**

a FINE CAR

For beautiful full color catalog, write: Crosley Motors, Inc., 2532-80 Spring Grove Ave., Cincinnati 14, Ohio

Operate a

# NEW YORK OFFICE

FOR AS LITTLE AS

## \$15 MONTHLY

List YOUR NAME and PHONE NUMBER in the New York Telephone Directory. Enjoy every advantage of a New York Office staffed by able, competent telephone secretaries.

We answer your calls—24 hours a day. We act as your secretary, answer questions, quote prices, note and forward leads, etc.

You have a prominent and distinctive Fifth Avenue address opposite Radio City—ideal for mail and 'phone inquiries.

For a superior Telephone Message Service of any kind—WRITE TODAY for further particulars.



**TELEPHONE EXCHANGE, INC.**

J. J. Freke-Hayes, President

595 Fifth Avenue, New York City



1 Official smiles greet opening at Watertown, Mass. E. T. Gibson of General Foods clips ribbon as George Bailey, Birds Eye manager (on step), and Robert Fanning look on

## Birds Eye Opens New Warehouse

Central location lets General Foods subsidiary give better New England distribution. Perked-up business back of move.



2 Shipments of frozen foods to dealers are prepared by breaking up carload lots into small orders. Temperature is zero, so workers retire for hot coffee every two hours



3 Fork-lift trucks and mechanized equipment speed warehouse handling. Operations are geared so that dealers in all parts of New England can get deliveries in 24 hours

# Tough...flexible...decorative...

## maybe it can give you ideas!



**T**HE material you see above is braided wire. Here at National-Standard it is produced in almost limitless variations... flat, tubular, plain, beamed, springlike or untempered, tight or expanded, in many wire sizes, in a great many widths, and of any metal that can be drawn into wire.

At present, the most common uses are for reinforcing pneumatic tire beads, high pressure hose and other rubber products. In these applications its strength and mechanical adhesion qualities are unsurpassed.

Considering its limitless variations and unique qualities, braided wire is bound to have many other effective applications. Perhaps it can save or make money for you! An interesting possibility, for example, is its use with transparent plastics to produce pleasing patterns as well as reinforcement.

If all this gives you an idea you'd like to explore, be assured that National-Standard, as usual, is ready to cooperate with you all the way. Let's talk it over. Just get in touch with the *National-Standard Company, Niles, Michigan.*



**DIVISIONS OF NATIONAL-STANDARD CO.**

ATHENA STEEL.. Clifton, N. J.....	Flat, High Carbon, Cold Rolled Spring Steel
NATIONAL-STANDARD.. Niles, Mich.....	Tire Wire, Fabricated Braids and Tape
WAGNER LITHO MACHINERY.. Jersey City, N. J.....	Lithographing and Special Machinery
WORCESTER WIRE WORKS.. Worcester, Mass.....	Round Steel Wire, Small Sizes



## Every Inch Wins Good Will!



ILLUSTRATED  
HALF SIZE

CALIBRATED  
BOTH SIDES

No.  
649



These 4 FT. ETCHED ALUMINUM RULERS are now available for quick delivery. Ideal for selective distribution, with your own advertisement engraved. Priced under \$2.70 in moderate quantities. Sample \$2.20.

Select an advertising gift from The EXECUTIVE Line now and distribute early to obtain best results. There's a wide variety of useful, attractive articles to choose from at this time.

50-YEAR DESK CALENDARS • LETTER OPENERS • CALIPERS • KNIVES  
CRYSTAL GLASS MONOGRAMMED ASH TRAYS AND CIGARETTE BOXES  
NOVEL PAPERWEIGHTS • TAPE MEASURES • RULERS • LIGHTERS • ETC.



These © Trademarks of  
**The EXECUTIVE Line**

are your assurance of quality and good taste in the selection of your advertising specialties.



If you cannot locate a reputable Advertising Specialty firm in your vicinity who handles the EXECUTIVE Line—write to

ALFRED ROBBINS ORGANIZATION, Inc. — 136 W. 54th St. — NEW YORK 19, N. Y.



### FLEETS THAT PROFIT WITH RAYTHEON RADIOPHONE

TRUCKING • BUS • TAXI-  
CAB • DELIVERY for drugs,  
department stores, laun-  
dries, cleaners, bakeries,  
diaper, fuel, beverage and  
many others. ARMORED  
CAR • AMBULANCE •  
CONSTRUCTION • EX-  
PRESS • MAINTENANCE  
for utilities, automobiles,  
municipal and many others

### RADIOPHONE

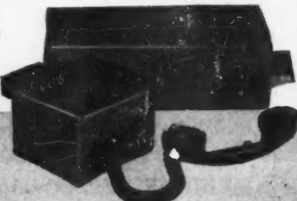
...a New Mobile Fleet Control

that CUTS COSTS from 10% to 30%

Modern fleet operations are more efficient with the instant control of Raytheon Radiophone. Operational records prove savings of as much as 30%. Two-way communication with every driver everywhere means savings in time, travel, delivery and sales costs.

Top performance is assured because Raytheon Radiophone is skillfully engineered, road tested and built to exacting specifications.

Simplified Installation • Noise-  
Free Reception • Low Cost •  
Low Maintenance • No Dialing •  
Out of Sight • Out of the Way •  
Long Life  
Compact, only 6" x 6½" x 15"



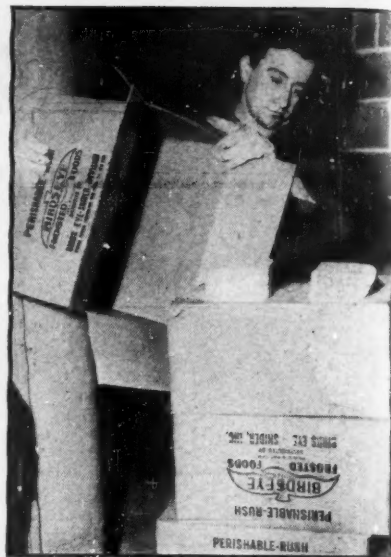
Ask for literature on Raytheon Radiophone

**BELMONT RADIO CORPORATION**

A Subsidiary of Raytheon Manufacturing Company

3923 W. DICKENS AVE. • CHICAGO 39, ILLINOIS

Sold Exclusively in Canada by Canadian Marconi Co., Marconi Bldg., St. Sacrament St., Montreal, Canada



4 Small orders to be shipped in non-refrigerated cars are packed in dry ice



5 The clerical staff at warehouse handles and catalogues 2,000 orders a week

## Signs of Recovery

Frozen food industry is on the comeback trail after last year's slump. Birds Eye makes the most of it.

The new Watertown (Mass.) warehouse for the Birds Eye-Snyder Division of General Foods Corp. is a sign of recovery in the frozen-foods industry.

• **Struggle**—A year ago, the industry generally was in a bad way (BW—Feb. 22 '47, p69). Many warehouses were piled high with foods. New processors were struggling to meet their creditors' demands. The big names were never in as

# If fishing is your hobby...

You have the equipment that's just right for you.

You find that you get the best results with tackle you prefer using.



# If typing were your job...

You'd use the typewriter that is just right for you.

It's a good bet that your choice would be a Royal—the typewriter that's built up an overwhelming preference among those who type.

To get the best results from your secretarial staff, supply them with Royals—the typewriters that are *preferred!*



## No "ifs" about it... Royals are tops

**Popularity!** Just see how Royal rates with secretaries and typists. A national survey shows that the preference for Royals equals the combined preference for the next three most popular standard office typewriters. Your typists will do *more* work, *better* work on machines they prefer using.

**Royal efficiency!** There are work-saving, time-saving features on a Royal not found on any other typewriter. That's why Royals are preferred. That's why they result in higher production per machine!

**Royal durability!** These typewriters are *really* sturdy. Royals stand up... spend more time on the job, less time out for repairs. With Royal, you get the maximum return for your typewriter investment!

# ROYAL—*World's No. 1 Typewriter*



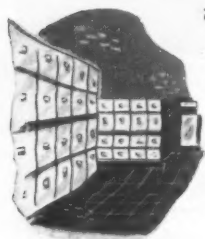
## IT ALL BEGAN WITH THE FIRST MATE'S NOSE

BACK around the turn of the century, the first mate had one rather odd job. He toured the deck at intervals, sniffing at pipes leading down to the holds. That's how fires were detected. ¶ We put the first mate's nose out of a job in 1919. That was when we got our start in the fire-protec-



tion business with the first Kidde\* smoke detection installation. Now, the officer in the wheelhouse could see the smoke in a glass-paneled cabinet. A little later, we added electric eyes that rang a bell when smoke was spotted. ¶ Of course,

shipboard is not the only place where fires can smolder unseen. So we adapted smoke detection to other uses. Today, there are Kidde smoke detectors in the cargo and baggage compartments of airplanes — in radio stations — in fur vaults holding millions of dollars' worth of goods. ¶ Smoke detection can do a job for you, by spotting the first smoldering start of a fire in your record vaults — before valuable documents burst into flames. Add a Kidde system for putting the fire out with non-damaging carbon dioxide (CO<sub>2</sub>) and your papers will have the protection they deserve.



Walter Kidde & Company, Inc. \*Also known as "RICH"  
625 Main Street, Belleville 9, N. J.



The words "Kidde" and "Rich" and the Kidde seal are trade-marks of Walter Kidde & Company, Inc.

# Kidde

MANUFACTURING ENGINEERS

serious trouble as the rest, but the general situation didn't help them any.

Now conditions have changed. The industry is sure it's on the way to stability and recovery. It was this change that was back of General Foods' decision to open a new central warehouse in New England.

• **Advantages**—The Watertown expansion offers several advantages—both to Birds Eye and its dealers. It triples Birds Eye's storage space in that area. It will permit Birds Eye to receive full carload lots of food from processing plants—at the less-expensive full-car rates. In turn, the warehouse will be able to make up full-carload or truck-load lots for shipment to dealers.

For dealers, it means smaller stocks on hand—and therefore more profits. This will be possible because refrigerated warehouse trucks will be able to rush deliveries to all parts of New England within 24 hours.

The wholesaling operation will be run through Q-F Wholesalers, Inc., a General Foods subsidiary.



METAL PLUS ELECTRONICS combine in the Liberty carillon to make . . .

## Bells Without Bells

Stromberg-Carlson buys out company which makes instrument producing near-perfect bell tones at low prices.

Stromberg-Carlson Co., Rochester, N. Y., is going into the electronic bell business. The maker of radios and amplification systems last week bought out Liberty Carillons, Inc., of New York City, for \$500,000.

• **Bargain**—Stromberg thinks the figure is a bargain. For it gets a company



# YOUR DOORWAY TO NEW-DAY MANAGEMENT



## AMERICAN AIRLINES AIRCONOMY PLAN

American's Airconomy Plan is based on an entirely new concept for the application of air transportation to the complete business operation. By coordinating air shipping, air travel and air mail, it provides an integrated program for widening your profit margin, reducing your

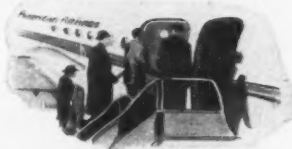
costs and expanding the scope of your business. It is management's greatest opportunity in many decades to make a comprehensive revision of transportation and communication policies — through the full realization of the possibilities and benefits of modern air transportation.

### SHIP BY AIR



Day-in, day-out use of American's Airfreight service offers many unique advantages to shipper and consignee alike. It's the key to faster, more efficient and more economical distribution—with new profits made possible by the inherent speed of air transportation.

### TRAVEL BY AIR



Regular use of air transportation by traveling personnel not only brings about large savings in valuable man-hours, but also increases the efficiency and productiveness of salesmen, representatives and executives. The radius of personal contacts is extended.

### MAIL BY AIR



Sending bills and all correspondence by air mail speeds paper work and increases the rate of capital turnover. You receive orders days sooner . . . your product is delivered earlier . . . billings are made sooner . . . and payments come in faster.

### YOU CAN'T AFFORD AN EARTHBOUND BUSINESS!

Check what American's Airconomy Plan can do for you:

- |  |  |
|--|--|
| <input type="checkbox"/> Quickens turnover—with smaller inventories          | <input type="checkbox"/> Permits productive personnel to cover more ground |
| <input type="checkbox"/> Averts disastrous mark-downs—reduces seasonal risks | <input type="checkbox"/> Increases personal contacts                       |
| <input type="checkbox"/> Makes re-orders easy—keeps field stocks fresh       | <input type="checkbox"/> Saves precious man-hours                          |
| <input type="checkbox"/> Helps open new markets, expand old ones             | <input type="checkbox"/> Shortens order-to-delivery-to-payment period      |
| <input type="checkbox"/> Cuts warehouse costs—reduces losses in transit      | <input type="checkbox"/> Gets field instructions out faster                |
| <input type="checkbox"/> Speeds up distribution, frees more capital          | <input type="checkbox"/> Streamlines end-of-month bookkeeping              |

## AMERICAN AIRLINES

### AIR MAIL THIS REQUEST TODAY

American Airlines, Inc., Department C,  
100 East 42nd Street, New York 17, N.Y.

GENTLEMEN: We are interested in your AIRCONOMY PLAN and the possibility of cutting costs and raising profits. We would like to talk with your sales engineers and find out how your plan applies to our business.

NAME OF FIRM \_\_\_\_\_

NAME OF INDIVIDUAL \_\_\_\_\_

ADDRESS \_\_\_\_\_

TYPE OF BUSINESS \_\_\_\_\_

# R.C. Allen

10-KEY ELECTRIC CALCULATOR



more for your money

Anybody can operate this 10-key calculator. Use it for all types of figure work . . . adds, subtracts, multiplies, divides . . . versatile for every business . . . extremely low priced.



PROMPT DELIVERY

"Figuring Today for the World of Tomorrow"

For authorized R. C. Allen sales and service, consult the yellow pages of your telephone directory

**R.C. Allen Business Machines, Inc.**

681 Front Street, N.W. • Grand Rapids 4, Michigan

ADDING MACHINES • 10-KEY ELECTRIC CALCULATORS • BOOKKEEPING MACHINES • CASH REGISTERS

Advertisement



## ENGINEER WINS NEW LOCOMOTIVE

**HOLGER LARSEN OF GLENDIVE, MONT.**—after 30 years of opening steam throttles—has just won a coveted seat in the cab of a sleek new Northern Pacific diesel. It's 200 feet long, 6,000 horsepower strong . . . it can hustle a mile-long freight along at a mile a minute. Larsen's streamlined engine is part of the N. P. expansion program, which includes a fleet of new diesels, new boxcars, new coaches, new sleepers, new diners, new lounge cars, new rail, new roadbed, new freighthouses. New, too, is the kind of service you'll find when you travel or ship freight on the Northern Pacific Railway . . . Main Street of the Northwest!

which is currently doing business at a \$3-million-a-year clip. Liberty Carillons has already put some 300 cathedral bell tower systems that are practically portable into churches, Army chapels, a bank, and even private homes.

The chief reason for all this success is that the Liberty carillon is the nearest thing yet to real bells; no listener without an educated ear can tell the difference. And engineers feel that within a few years they can get the system down so that even a musician won't know the difference. Yet the "bells" are nothing more than a set of thin metal rods, metal hammers, a keyboard similar to a piano, and an amplification system (picture, page 82).

• **War Product**—The Liberty carillon was a product of the war. The summer before Pearl Harbor, J. Austin Smith, president of Liberty Carillons, attended a meeting of Army chaplains. At the meeting Gen. George C. Marshall, then Chief of Staff, said that he wanted the world's finest chaplain corps. To help them in their morale-building work, he wanted carillons. But there was a catch: The bells would have to be made without bell metal, since that metal couldn't be spared.

To a bellman, this qualification was ridiculous. Nobody had ever created a real bell tone without a real bell. "Tubular" bells, shaped like chimes, had been tried; so had chime recordings and electronics. Always something authentic was lacking; the overtones just weren't the same as in bells.

• **Success**—Nevertheless, Smith tossed the problem in the lap of Liberty's engineer-designer Francis Dodds. In less than six months, Dodds had developed a carillon—and it sounded like the real thing. The first one was installed in the chapel at Fort Myer, Va., for a Sunday morning service on historic Dec. 7, 1941.

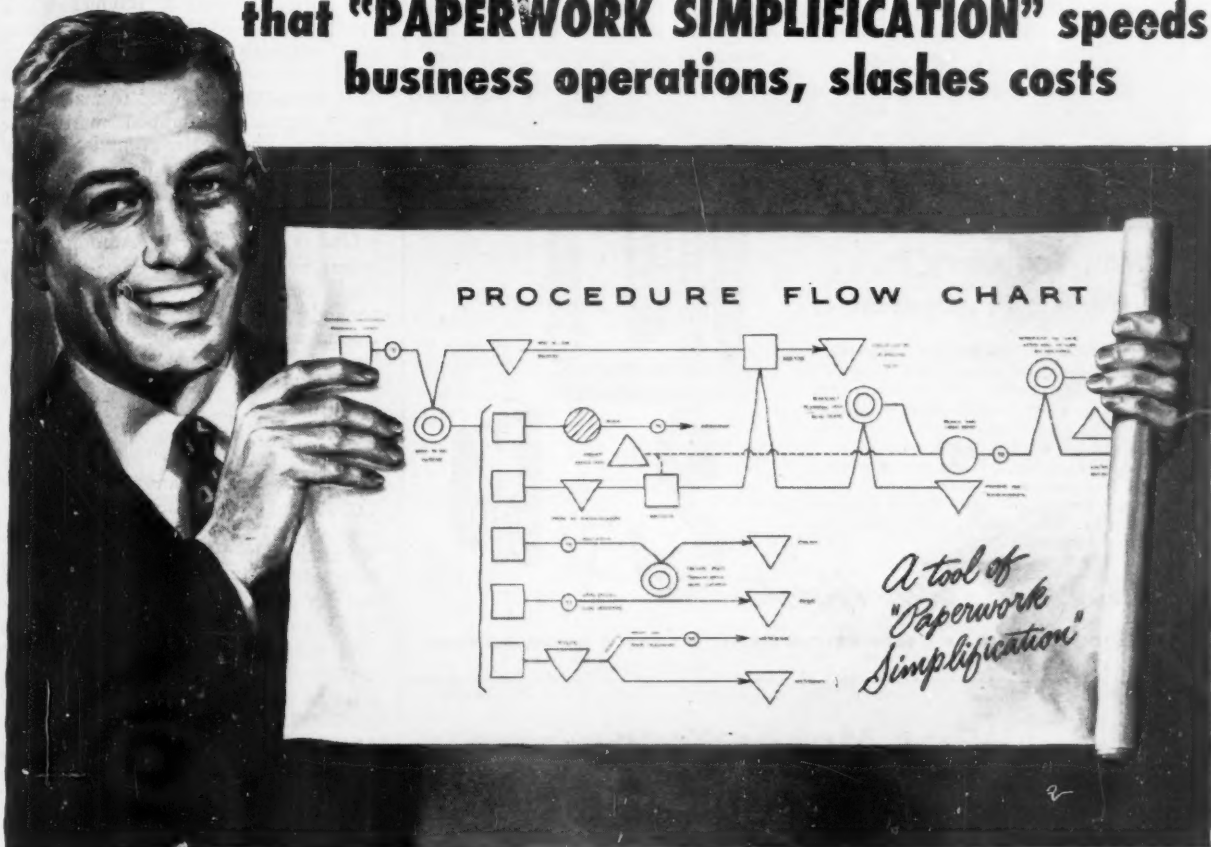
The Army decided that the life-like bell tones of the instrument were just what it wanted for morale building. So it had Liberty Carillons build half a dozen more for military chapels, and a portable one to play at camps and embarkation centers.

• **Marketing Advantages**—After the war, the company figured that its new instrument had almost unlimited marketing possibilities. With the prices for bell metal soaring, a 25-bell carillon system could cost as much as \$300,000. Even a single, modest, half-ton church bell would bring \$3,000.

The average church can ill afford that kind of money. But it can afford what Liberty has to offer—a complete carillon for anywhere from \$1,524 to \$40,000. The average price is between \$3,000 and \$4,000. The company plans to market a single electronic bell note at \$495. It will simulate a bell weighing 4,600 lb., will be operated by a pushbutton on

# WE'LL PROVE TO YOU

that **"PAPERWORK SIMPLIFICATION"** speeds business operations, slashes costs



**Exclusive Standard Register techniques reveal ways to reduce paperwork, eliminate red tape, and tighten control of all phases of business!**

Standard Register's exclusive Procedure Flow Charting has shown thousands of businessmen how "Paperwork Simplification" results in startling new efficiency and control in any department of business. It is only one phase of the special techniques by which Standard specialists develop improved methods . . . and design and produce marginally-punched, continuous forms . . . both essential elements in "Paperwork Simplification." No other company offers you such *complete service!*

"Paperwork Simplification" cuts the cost and effort of writing and handling forms, gives you great savings in factory and office overhead and improved employee morale. But most important, it results in accurate, tighter control of business. Think what this means! Reduction of costly errors and delays in serving customers and clients. Improved quality control of product. Speedier distribution. There's *almost no limit to the benefits and savings!*

Get "Paperwork Simplification" started in your organization. Write today on your letterhead for a copy of "The A.B.C. of Work Simplification In Office Operations."

**Bring Your Forms Up To Standard**



© 1948 The Standard Register Company

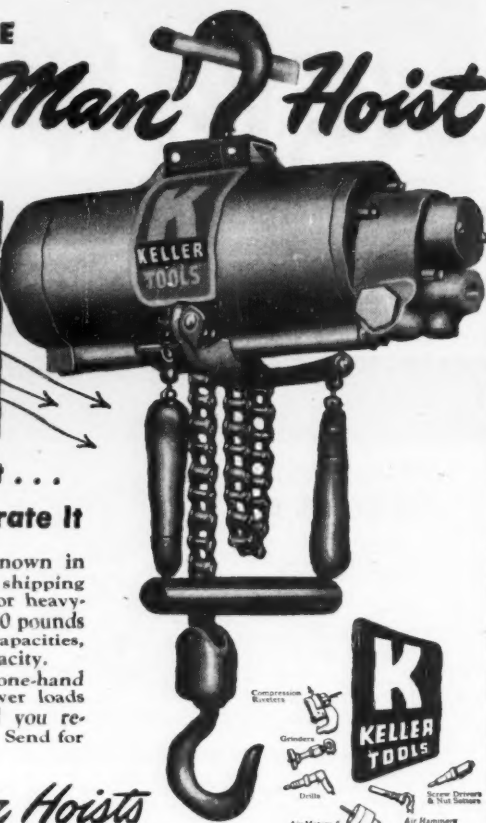
THE STANDARD REGISTER COMPANY, 706 Campbell Street, Dayton 1, Ohio  
Pacific Coast: Sunset McKee-Standard Register Sales Co., Oakland 6, California. Canada: R. L. Crain Limited, Ottawa. Great Britain: W. H. Smith & Son, Ltd., London



THE MOST USABLE

# One-Man Hoist

YOU CAN BUY



One Man Can Carry It . . .

Hang It . . . Operate It

These one-man hoists are known in factories, foundries, shops, and shipping rooms as "lightweight hoists for heavy-duty jobs." They weigh only 30 pounds in the 1/2-ton, 1/4-ton, and 300-lb capacities, and 75 pounds in the 1-ton capacity.

Speed is variable. With the one-hand control bar you can lift or lower loads without effort . . . at any speed you require, up to 17 feet per minute. Send for illustrated bulletin.

**KELLER** Air Hoists

KELLER TOOL COMPANY • 4806 HARBOR STREET • GRAND HAVEN, MICHIGAN



## What Makes Your Building NEW?

The cover of your new building may be modern but what about the frame? The latest improvement in industrial buildings is the McCloskey RIGID-STEEL frame. It eliminates bulky overhead trusses—gives you more head-room with less height at the eaves. This means less cover to buy—to maintain. It will pay you to find out how you can get the newest and best in buildings. Write for the McCloskey story today.

**McCLOSKEY COMPANY**  
OF PITTSBURGH

3401 LIBERTY AVENUE, PITTSBURGH 1, PA.

the pulpit or the pastor's desk, strike 28 times a minute.

• **Keystone**—Stromberg-Carlson figured that all this fitted nicely into its own experience. A keystone of the Liberty carillon success is proper amplification. During the war, Stromberg had made high-fidelity amplification systems for the Navy. It was a product which showed a remarkable ability to withstand humidity, heat, and cold.

After the war Stromberg decided that its systems could be used to make a bid for a virtually untapped market—the churches. The theater amplification system was a crowded field, but there were 10 times as many churches and chapels as theaters.

• **Orders for Liberty**—Among other orders, Stromberg filled those of Liberty Carillons for about a year. (Liberty needed big speakers to amplify the electro-magnetic vibrations which produce its bell tones.) The result of this relationship was the sale of Liberty to Stromberg.

The deal gives Stromberg 150 Liberty retail outlets, many of them also Steinway piano and Hammond Electric Organ dealers. Few of them overlap Stromberg outlets.

• **Search**—The new item which Stromberg will be selling looks fairly simple, but actually represents a great deal of development work. The first tough job that engineer Dodds faced in making a Liberty carillon was finding the right kind of tone bar. He tried several hundred different materials and shapes before hitting on the present 1-in. bars. They range in length from about 6 in. to 2 ft., depending on the note that is desired.

But Dodds' toughest problem came after he finally found the right bar: where to place his electro-magnetic pickup to amplify the bar's vibrations. The object was to have the pickup stress certain overtones, soft-pedal others. Dodds figured that there were about 440,000 possible combinations of overtones in each bar. He had to work out the right ones by hit or miss.

• **Overtones**—Dodds thinks he was lucky: He hit a pleasing combination after only a few thousand tries. But he still isn't satisfied. His bells now sound "Flemish"—that is, the most prominent overtones are two minor "thirds." He wants them to sound more "British"; this means that he must stress the overtone of the "fifth"—a triumphant, major chord.

Today Dodds is grinding his bar and trying to place his pickup so that it will stress that fifth. It's a job that he figures may take two or three more years. Meanwhile, Stromberg and Liberty both think that they can find plenty of markets for the near-perfect reproduction of Dodds' Flemish-sounding bells—the Liberty carillon.

# FINANCE

## Trend to Private Placements

	Total Capital Flotations	Publicly Offered (Millions of Dollars)	Sold Privately	% of Private Placements to Grand Total
1937 .....	\$2,433.7	\$1,977.4	\$456.3	18.7%
1938 .....	2,140.5	1,460.0	680.5	31.8
1939 .....	2,196.2	1,467.6	728.6	33.2
1940 .....	2,762.6	1,928.0	834.6	30.2
1941 .....	2,618.8	1,661.5	957.3	36.6
1942 .....	1,042.5	608.6	433.9	41.6
1943 .....	1,080.9	808.0	272.9	25.2
1944 .....	3,181.1	2,311.1	870.0	27.4
1945 .....	6,258.6	4,975.0	1,283.6	20.5
1946 .....	6,563.8	4,982.2	1,581.6	24.1
1947 .....	6,274.5	4,151.2	2,123.3	33.8
1948, January-May	2,609.9	1,529.5	1,080.4	41.4

Private placement of new security issues is flourishing as never before. There's no question that such sales direct to institutional investors—particularly insurance companies—have put down lasting roots in the corporate financing system. But within this overall trend, three subrends this week become more apparent:

(1) A larger proportion of private sales today involve smaller issues—\$5-million or less.

(2) Underwriters, normally bypassed by the direct seller-to-buyer deals, are getting back into the picture by acting as "finders" for private placements.

(3) Some state insurance commissioners are showing concern over the growth of private-placement business and its effect on insurance companies.

• **Steady Growth**—Private placements began to crop up in the financial news in the early 1930's. The trend grew fast after passage of the Securities Act of 1933—with its emphasis on "full disclosure" for publicly offered security issues. But throughout this period most underwriters thought the trend would be short lived. The figures have proved them wrong. Here is the historical record of private placements, as compiled by the Commercial & Financial Chronicle:

• In 1937, \$456-million, or 18.7% of all corporate capital flotations;

• In 1946, \$1.6-billion, or 24.1%;

• In 1947, \$2.1-billion, or 33.8%;

• In the first five months of 1948, almost \$1.1-billion (that's at the rate of \$2.6-billion for the whole year), or 41.4%.

• **Fewer Big Deals**—This year's total is made up of a larger number of smaller

deals than those of earlier years. There has been no private placement in 1948 to match the \$150-million General Electric or the \$125-million General Motors financings of 1946 (BW—Aug. 26 '46, p88), or the \$120-million Texas Eastern Transmission Corp. transaction of last fall (BW—Nov. 22 '47, p90).

That doesn't mean that there haven't been some pretty good-sized issues this year. Among the deals announced in recent weeks:

\$84-million of Gulf Oil Corp. 25-year 3% notes;

\$35-million of Standard Oil Co. (Ohio) 20-year 3% debentures;

\$30-million of C.I.T. Financial Corp. \$4 preferred stock (page 96);

\$25-million of Tennessee Gas Transmission Co. 18-year 3½% debentures;

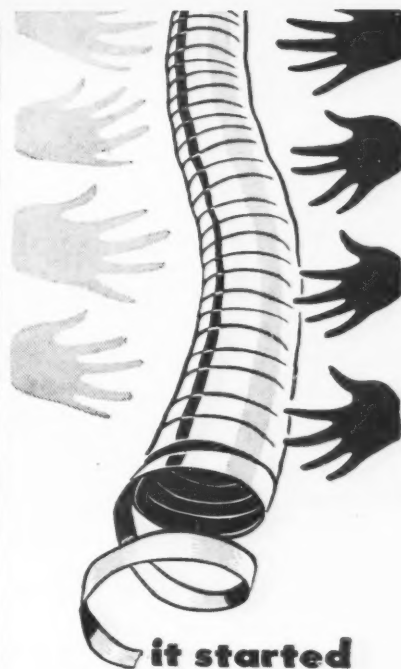
\$15-million of Federated Department Stores 20-year 3.18% notes;

\$15-million of Houston Lighting & Power Co. 30-year 3% mortgage bonds.

• **Move Small Issues**—But, generally speaking, the institutional investors, particularly the life insurance companies, have become more interested in spreading their corporate investment risks—by putting less money into each of a larger number of issues.

In the first five months of 1948, the 171 reported private sales averaged only \$6.3-million. Of the 30 private placements reported in May, only four involved more than \$5-million. Nine were for \$1-million or less; another nine, between \$1.1-million and \$2.5-million.

• **Not Happy**—The growth of private-placement business has been unwelcome



it started  
*A Spiral*  
of new ideas

CMP Stainless Thinsteel with the new mirror-bright finish—available even in annealed 18-8 grades—opened the door to new and less expensive applications for cold rolled stainless strip. Through a combination of special rolling and annealing techniques, a highly lustrous finish is secured and retained through the last mill operation. The finished strip product is thus delivered ready for fabricating, without need for additional costly polishing, and buffing of finished products can be reduced or eliminated. For old and new products where stainless strip .001" and heavier can be used to advantage, CMP Stainless Thinsteel offers greater utility and beauty, with the probability of lower end product cost. A request on your letterhead will bring you a sample.



the Cold Metal Products co.  
YOUNGSTOWN, O.

NEW YORK • CHICAGO • DETROIT  
ST. LOUIS • BUFFALO • INDIANAPOLIS  
LOS ANGELES • SAN FRANCISCO



All our work is built from the most carefully prepared plans, the draughting-room being in charge of just that kind of a man.

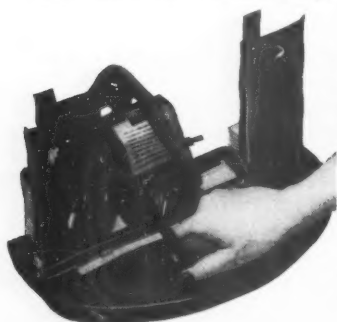
(This cartoon is reproduced from the humorous Elliott Bicycle Catalog of 1888.)

**SUPPOSE YOU** manufactured addressing machines and suppose you claimed that your addressing machines would save almost as much more time and money compared with other addressing machines as other addressing machines save compared with hand addressing.

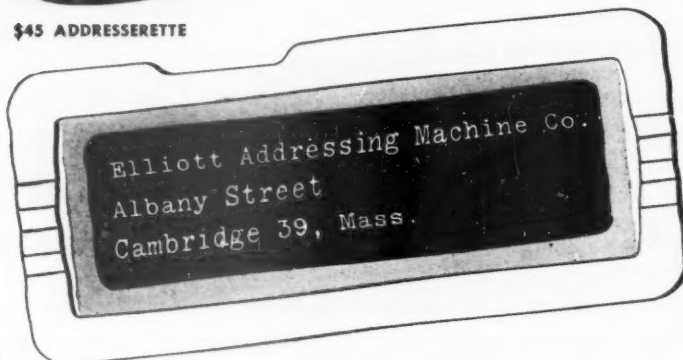
And suppose a skeptical world thought your claims were too good to be true.

Wouldn't it be a good idea to build a little sample addressing machine for the owners of old fashioned addressing machines to try—so they could learn by actual trial of the many advantages your product could bring to them?

That is just what we have done. And this \$45 sample Elliott Addressing Machine is awaiting your free trial and you can return it for full credit after you have compared its method of printing addresses with your present mechanical addressing equipment.



\$45 ADDRESSERETTE



If you now own old fashioned metal address plate equipment we will change your entire metal address plate file, including cabinets and filing trays, in which we will file the new, clean, silent, typewriter-stencible Elliott Address Cards, with your addresses stencilled in them, all inked up and ready to use, at a cost of only 2 cents per address.

Two interesting and informative booklets will be sent upon request. Simply write, on your business letterhead, to The Elliott Addressing Machine Company, Dept. 6-B, 151 Albany Street, Cambridge 39, Mass.

news for Wall Street. Much of the Street's bread and butter (and sometimes cake) comes from the commissions it receives (1) for underwriting new issues and selling them to the public, and (2) from open-market trading in those securities after they have been sold. Not only do private placements bypass the underwriter, but also they serve to keep the new issues out of the open market afterwards.

To recoup some of this loss, many underwriters have been playing both sides of the new-issues street. In addition to underwriting publicly offered issues, they have been acting as middlemen in private deals. What's more, the "finder's fee" collected for such a service often exceeds the profit that would have been made if the same issue had been underwritten and offered in the usual way.

• **Viewing With Alarm**—Even so, the Street prefers public offerings. So, underwriters have been a bit encouraged by reports of the proceedings at a couple of routine meetings of state insurance commissioners. These authorities, the reports say, fear the possible results of an unchecked trend to private placements. There are several reasons for their uneasiness:

(1) In buying an issue privately, an insurance company substitutes its management's investment judgment for the



## Honor for Aldrich

A man with global interests, banker Winthrop W. Aldrich (left) was honored for international work of a nonbanking kind last week. With his wife at the British embassy in Washington he got this silver cup from Sir Oliver Franks, British ambassador. The cup was part of a ceremony in which the chairman of the Chase National Bank became Knight Grand Cross of the British empire. The honor was for his work on British war relief.





## FIBERGLAS\*

### ... Lifeguard for Tough-Service Batteries!

The batteries in a highway-roving bus lead a tough life—heavy-duty service at a pace that would spell quick death for an ordinary battery. That's why heavy-duty batteries contain more and bigger plates . . . and Fiberglas.

Fiberglas Retainer Mats double-insulate the positive plates, hold power-producing material where it belongs. For when a battery gives off or absorbs electrical energy, there's a chemical reaction that frequently causes active material to shed from the battery plates. This action results in plate corrosion and short circuits—prime causes of battery failure.

To combat these conditions, most manufacturers now offer batteries double-insulated with Fiberglas . . . thin, porous mats of inorganic fibers of glass. Fiberglas Retainer Mats represent a major advance in battery design that improves performance and extends battery life.

Fiberglas-insulated batteries are available everywhere. For your car, your company fleet, for industrial applications . . . ask your battery supplier about them. Owens-Corning Fiberglas Corporation, Dept. 803, Toledo 1, Ohio. Branches in principal cities.

*In Canada: Fiberglas Canada Ltd., Toronto, Ontario*

*Battery shown is the Exide battery for bus service.  
Photo courtesy  
of Greyhound Lines.*

OWENS-CORNING  
**FIBERGLAS**

**BATTERY  
RETAINER  
MATS**

\*FIBERGLAS is the trade-mark (Reg. U.S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

Packers and supermarkets have found the answer to fast pre-packaging of meats in our Universal 4 and FF machines.



*There's always something new in Packaging*

and "PACKAGE" has the machines to do it



Textile manufacturers are wrapping their products on our Model FA-2T machine.



Vegetables and fruit wrapped on our Universal 4 machine for outsell produce in bulk.



Mothers will welcome this sanitary wrap for baby's toy—made on our FA machine.

A sandwich and two portions of potato chips come in this handy FA-wrapped package.

Golf balls are among the many new items being wrapped on our FA machines.

**PACKAGE MACHINERY COMPANY**

Over a Quarter Billion Packages per day are wrapped on our Machines

collective opinion of the marketplace. Such a purchase might be difficult to justify if the issue should go sour.

(2) If a debtor gets into trouble, there might be a temptation for a sale creditor to work out some agreement—waiver of sinking-fund payments, for instance—which would technically keep the issue out of default. In this way, shaky securities might be carried on the insurance company's books at par.

(3) Unsecured loans (notes or debentures) are increasing in number and importance. These are particularly risky for small insurance companies. For one thing, the smaller insurers often don't have investment staffs adequate to analyze the borrower's operations and financial position carefully. For another, such unsecured-loan agreements are often not sufficiently hedged with clauses to protect the investor in case the debtor runs into trouble.

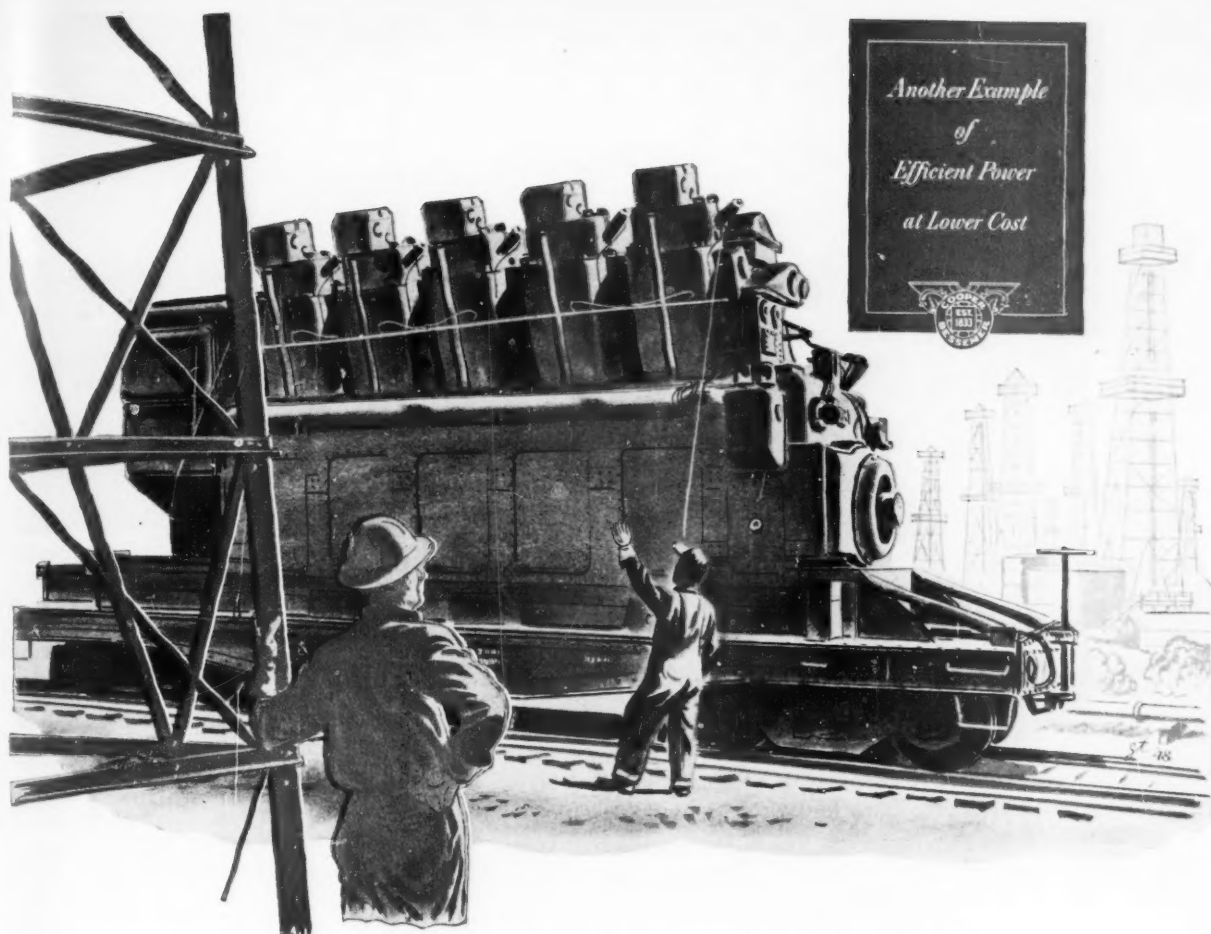
• **Case in Point**—No specific cases were mentioned at the insurance commissioners' meetings, the Street hears. But they might have been thinking, for instance, of the direct purchase of \$40-million of Transcontinental & Western Air debentures by Equitable Life Assurance Society (BW—Dec. 15 '45, p. 68). Because of the financial troubles the airline has had since then, Equitable is reported to have written the book value of that issue down to \$24-million.

• **Advantages**—Nevertheless, the Street expects that the insurance companies will continue to supply large amounts of capital directly to industry. There are too many advantages, for both the



## Harbinson-Walker Head

Earl A. Garber will step up from vice-president to president of Harbinson-Walker Refractories Co. on July 1. With 46 years of service, Garber takes over from retiring president Raymond Willey.



## **GAS INDUSTRY TO SAVE MILLIONS . . .** **your tip-off to reduced power cost !**

**T**HIS is the story of another long-range Cooper-Bessemer development . . . the *Turboflow* engine . . . already paying off in a *big* way for many power users.

For example, it takes millions of compressor horsepower to push gas through the nation's cross-country pipe lines. Millions more will be needed. This power comes from hundreds of huge gas-fueled engines. For years Cooper-Bessemer has furnished such units, is now supplying more and more of the newly developed *Turboflow* type, like the one above. Here's why . . .

The *Turboflow* principle reduces fuel consumption a full 15%. Applied to one major gas line alone, enough gas would be saved to do all the cooking *continuously* for 20,000 homes! Secondly, *Turboflow* engines produce 10% *more* power than old-styled engines of the same size and speed. Less space and fewer engines needed! Savings in installation, housing, maintenance and operation are tremendous! The industry and consumers can save millions

of dollars . . . and billions of cubic feet of gas, otherwise consumed in distribution, can be conserved for other uses.

The same kind of research and development work that led to the *Turboflow* engine is applied to Cooper-Bessemer engines for *all* heavy-duty services . . . marine, locomotive and stationary applications of every description. It has brought one important development after another.

If you want to know how you can cut your power costs year in, year out, find out about the *new* things being done by one of America's *oldest* engine builders.







## Here's a proved method for INCREASING WORKER PRODUCTIVITY

Increased production per worker can be accomplished. One way that has proven effective for many leading American companies is use of the Bausch & Lomb Industrial Vision Service. Results show that production efficiency of workers is directly dependent on visual ability . . . that every job has definite visual requirements which can be scientifically determined. Don't blame an employee if he is a round peg in a square hole. Test all present and prospective workers scientifically for job placement.

The B&L Industrial Vision Service sets up visual job standards against which visual skills are compared. Those failing to meet the standards may be helped by professional eye care or may be transferred to a job where their vision is no longer a handicap and often an asset.

The B&L Industrial Vision Program positively demonstrates its value by increasing worker production . . . also improving quality, reducing accidents, decreasing training costs and labor turnover, and boosting employee morale. This service can help your company. Look into the plan today.

### BAUSCH & LOMB

OPTICAL COMPANY

ROCHESTER 2, N. Y.

Industrial Vision Department  
Bausch & Lomb Optical Co.  
773-S St. Paul St., Rochester 2, N. Y.

Please send me a copy of "Vision in Industry" and details of the Bausch & Lomb Industrial Vision Service.

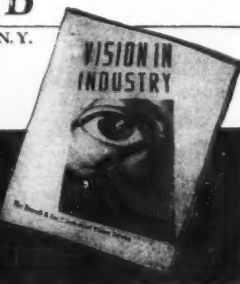
NAME .....

TITLE .....

COMPANY .....

STREET .....

CITY ..... STATE .....



borrower and the lender, which indicate that there will be no reversal of the private-placement trend. Among them:

**FOR THE BORROWER:** (1) Both time and expense are saved; (2) there is no need to make full disclosure of information that might be of value to competitors.

**FOR THE LENDER:** (1) A somewhat higher rate of return is available, because of the elimination of such charges as middlemen's fees; (2) it is possible to make a larger investment in a single issue than is usually possible in the open market, so portfolio supervision is easier; (3) investment timing is better, because private commitments can usually be spaced over several months.

## Food Machinery Expands Into Fertilizer

The Food Machinery Corp., San Jose, Calif., has long made everything in the agricultural line from water pumps and hand sprayers to insecticides and peach defuzzers. This diversification has given it a tidy, profitable business (BW—Apr. 10'48,p88). But to complete its line, F.M.C. needed to add fertilizer.

Last week F.M.C. did just that. Jointly with the directors of the Westvaco Chemical Corp., makers of fertilizer, it announced merger plans—subject to approval by the stockholders of both companies. Owners of Westvaco common will get 14 shares of F.M.C. for each share Westvaco. A new issue of Food Machinery preferred will be exchanged, share for share, for Westvaco's \$3.75 cumulative preferred.

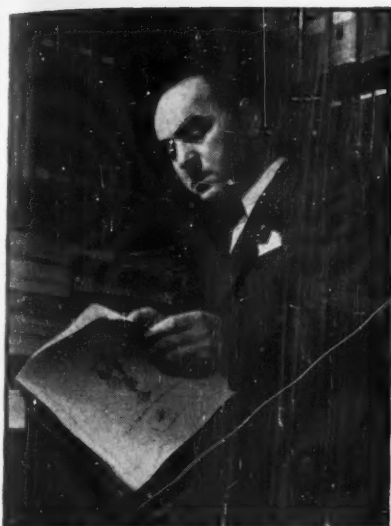
The merged company will be known as Food Machinery & Chemical Corp. There will be no change of management. The Westvaco plants will be operated as the Westvaco Chemical Division.

## NEW ISSUE STALLS

The corporate new issues market has perked up a bit lately (BW—Jun. 5'48, p91). But investors are still quick to show buying resistance when they think offerings are overpriced.

Last week \$12-million in new Kansas City Power & Light 2½% bonds were offered on a 2.775% yield basis. There were few takers. And there weren't many more when the price was lowered and the yield boosted to 2.80%; 66% of the bonds remained unsold. So they were offered this week at 101% of par to yield 2.82%-plus.

This turned the trick. But it was an unprofitable deal for the underwriters: They had paid the company 101.52% of par for the issue.



TRACER D. M. Eisenberg looks for . . .

## Lost Stockholders

Skip Tracers Co. adds search for "missing" securities holders in companies to its business of tracing lost persons.

New York's Skip Tracers Co. makes a good income through a unique business — finding missing persons. This week, with nearly 25 years and more than 300,000 cases under its belt, Skip Tracers can well boast of its work. For it has found some 80% of the people it has looked for.

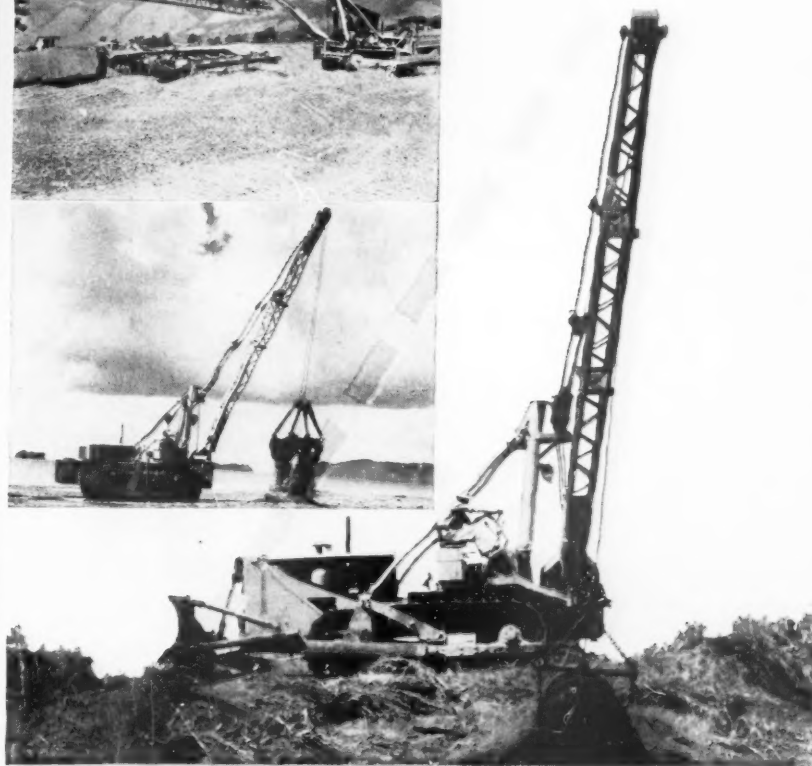
• **Biggest Enterprise**—Skip Tracers, like radio's fictional "Mr. Keen," covers the whole field of missing persons. Since 1924, it has found husbands, wives, sweethearts, debtors, heirs, witnesses to old wills, patent-holders. Cases have come from law firms, banks, foreign consulates, public officials, private individuals. Skip Tracers claims it is the biggest enterprise of its kind in the country today.

The "Mr. Keen" of Skip Tracers is Daniel M. Eisenberg (picture, above), the company's founder and president. Despite its success, he still isn't satisfied that it has done all it can. So lately he has broadened its work to include the search for missing security holders.

• **For Corporations**—Recently, says Eisenberg, Skip Tracers has found lost shareholders for: Pet Milk, Bendix Aviation, American Woolen, Arden Farms, Philco, Columbia Gas & Electric. (For this last company, Skip Tracers found more than 80% of 600 "missing" stockholders.)

Eisenberg figures that he has only scraped the surface of corporation work so far. He's probably right: Authorities say that huge sums of unclaimed divi-

## PUT THIS EXCAVATOR ON YOUR TRACTOR IN 2 HOURS



**DRAGLINE, CLAMSHELL AND CRANE FOR  
MOUNTING ON "CATERPILLAR" D8, D7,  
D6 TRACTORS, NEW OR USED...**

*—that's HYSTAWAY*

Talk about work performance! A bulldozer equipped "Caterpillar" track-type tractor with Hystaway shortens job schedules and lowers production costs. Hystaway does practically everything that a conventional shovel can do—and costs less! It can be mounted by 2 men in 2 hours and taken off in 1 hour (after initial installation). Your "Caterpillar" distributor can arrange a Hystaway demonstration. *Current Delivery.* Write for literature.

**HYSTER COMPANY**

2907 N. E. CLACKAMAS ST., PORTLAND 8, OREGON  
1807 NORTH ADAMS STREET, PEORIA 1, ILLINOIS



## SOME DAY YOU'LL BE A FORT WAYNE CONTAINER

Yes... the woods are full of Fort Wayne products. Great pine forests in Georgia, Florida and the Carolinas have a certain destiny—they'll serve a nation's shippers as Fort Wayne corrugated containers. Through control of these widespread woodlands, through scientific tree farming and reforestation, Fort Wayne commands an ever-replenished source of raw materials for tomorrow and the years to come. Through control of conversion methods, manufacturing procedures, fabrication techniques, Fort Wayne achieves completely controlled production from the forest to the loading platform. That's where controlled quality comes from... laboratory controlled uniformity of container strength, appearance, performance... essential qualities in every good shipping container.

CORRUGATED FIBRE BOXES  
CORRUGATED PAPER PRODUCTS

## Fort Wayne CORRUGATED PAPER COMPANY

**General Offices:**  
Fort Wayne 1, Indiana

**Plants:**  
Rochester, New York  
Chicago, Illinois  
Pittsburgh, Pennsylvania  
Hartford City, Indiana

**Mills:**  
Hartford City, Indiana  
Vincennes, Indiana

**Affiliate:**  
Southern Paperboard Corporation  
Port Wentworth, Georgia

**Sales Offices:** Chicago, Ill. • Pittsburgh, Penna. • New York, N. Y. • Rochester, N. Y. • Buffalo, N. Y. • Jamestown, N. Y. • York, Penna. • Cleveland, Ohio • Lima, Ohio • Dayton, Ohio • Cincinnati, Ohio • Muncie, Ind. • Indianapolis, Ind. • Detroit, Mich.

FABRICATION RATING											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV
120											
110											
100											
90											
80											

dends, interest, and so on have been lying dormant for years.

• **Obligation**—Eisenberg thinks that corporations have a moral obligation to make at least one serious stab at locating their missing stockholders. Any costs involved, he reasons, are a legitimate public relations expenditure.

His strongest argument for such action is that state legislators are toying with the idea of passing escheat (lapse of ownership) laws. These would siphon a big chunk of unclaimed dividends into state treasuries. New York's legislature had such a law before it last winter.

• **Origin**—Eisenberg says that tracing lost security holders isn't any tougher than locating a missing husband. He isn't giving his know-how away; but evidently his system—in addition to directories, etc.—includes a string of "correspondent" helpers. Skip Tracers' prices vary with the size of a job. Locating 10 persons is more expensive per capita than locating a 100.

Eisenberg's father was indirectly responsible for the company. The family was poor, and whenever the young Eisenberg wanted some money his father teased: "Why don't you locate your two rich uncles in Europe—they'll give you some."

That gave Eisenberg the missing-persons idea; he founded Skip Tracers shortly after leaving high school.

## Prudential Buys Block of C.I.T. Preferred

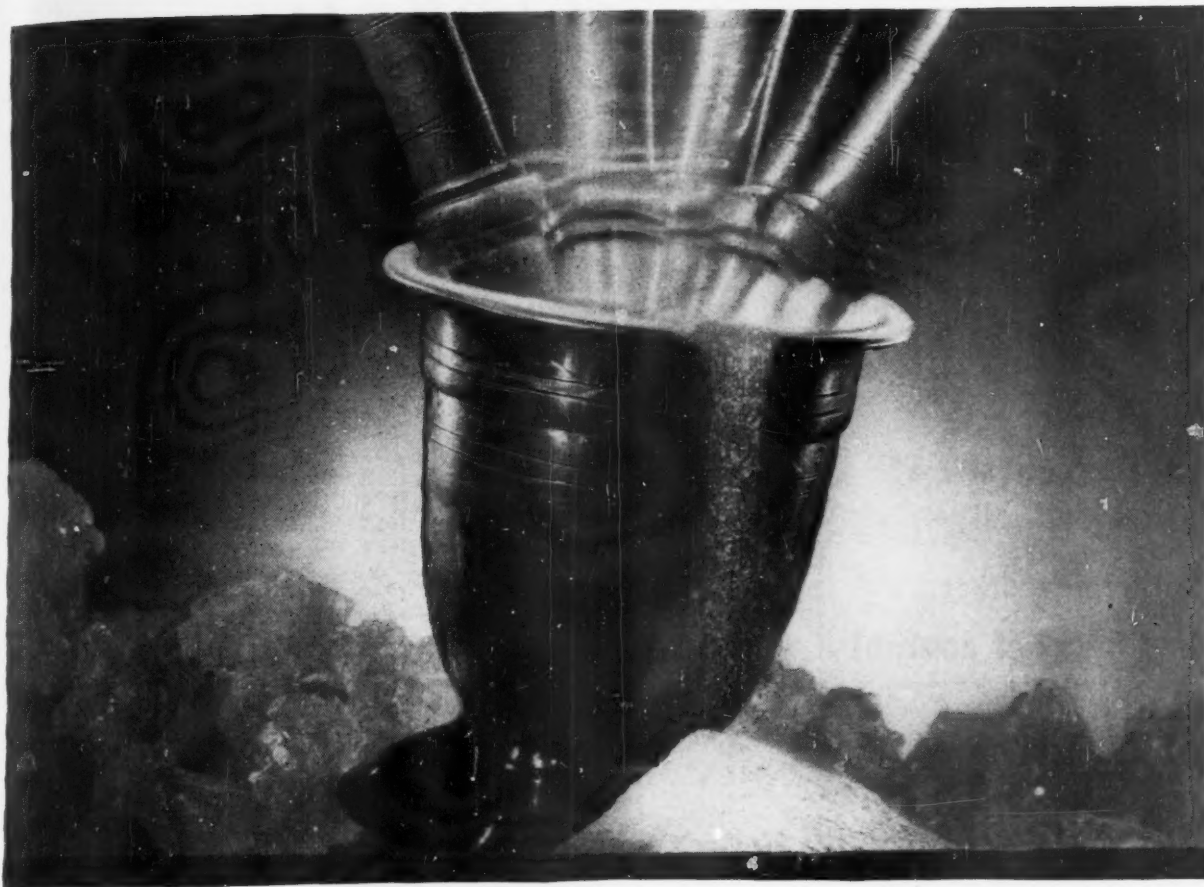
The Prudential Insurance Co. of America has taken a big new bite of preferred stocks to hold as an investment. It bought from C.I.T. Financial Corp. a 300,000-share block of new \$4 preference stock at \$100 a share. Financial men think this is the largest purchase of preferred shares ever made by a single buyer.

Through this transaction Prudential has boosted its holdings of preferreds by some 25%. It has likewise become one of C.I.T. Financial Corp.'s largest stockholders. Before the deal went through, C.I.T.'s only outstanding capital stock comprised 3,580,948 shares of no-par common carried on its books at a valuation of \$55,505,000.

But Prudential isn't the only one of the Big Five life companies with a big stake in C.I.T. Now outstanding are \$50-million 20-year 2½% unsecured notes, which Metropolitan Life bought privately from C.I.T. last March. Metropolitan also holds another \$50-million of similar 1½% notes due in 1950. These it got at private sale early in 1947.

Proceeds of C.I.T.'s latest privately negotiated financing deal brings its consolidated capital and surplus above \$140-million.





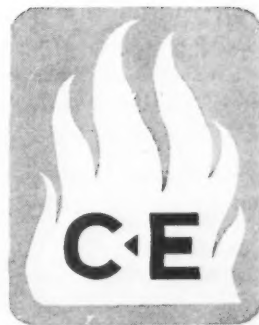
## Pulverizing — *materials of Industry*

For a multitude of products that enrich our lives, we owe a debt to modern methods of grinding and pulverizing evolved from the mortar and pestle. The soothing softness of talc . . . pigments for paints and dyes . . . the velvet smoothness of pencil graphite . . . natural and synthetic resins for a myriad of plastics . . . high fineness flour, cocoa and sugar for the nations' kitchens . . . coal crushed to dust for the great boilers of industry and public utilities and for the kilns that produce more than 90 per cent of the world's cement . . . these, and a host of chemicals, clays and non-metallic ores, depend on pulverization for much of their usefulness.

In the development of this vital process, the Raymond Pulverizer Division of Combustion Engineering has been in the forefront for more than sixty years. It is,

today, the unquestioned leader in the production of universal grinding equipment. C-E Raymond roller, hammer and bowl mills deliver products produced to specified refinement . . . from coarse granules to particles finer than 4-one hundred thousandths of an inch.

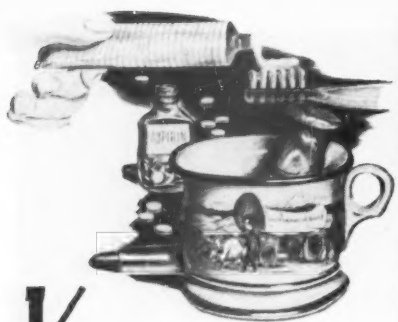
The link between pulverization and C-E's familiar field of steam generation lies in the adoption of pulverized coal for firing large capacity boilers, a method pioneered by C-E engineers nearly thirty years ago. The total contribution of pulverized coal firing to industry cannot be calculated, but it is safe to say that in coal savings alone it amounts to millions of tons annually. Thus, pulverization shares with other C-E products and processes the common basis symbolized by the C-E flame . . . efficient utilization of heat for the needs of all.



### COMBUSTION ENGINEERING

200 MADISON AVE. • N. Y. 16, N. Y.

C-E Products include all types of Boilers  
Furnaces • Pulverized Fuel Systems  
Stokers • Superheaters • Economizers  
Air Heaters. Also, Pressure Vessels  
Chemical Recovery Equipment • Flash  
Drying Systems • Sewage Incineration  
Equipment • Domestic Water Heaters.



**1/12** of the nation's  
drug market...  
that's California!  
Direct line to the  
California market...  
that's Bank of America!



What's happening in California?  
The story of the growth of this market  
is told in a new book, "What's Happening  
in California?" just published  
by Bank of America. For your free  
copy, write Bank of America, De-  
partment AD, San Francisco, or De-  
partment AD, Los Angeles.

## Bank of America

NATIONAL TRUST AND SAVINGS ASSOCIATION

Resources—more than \$5 billion

Member Federal Reserve System  
Member Federal Deposit Insurance Corp.

San Francisco • Los Angeles  
London • Manila • Tokyo

New York Representative, 44 Wall Street

# THE MARKETS

## Prices Trace an Upward Pattern

Week Ended		Industrial Stock Prices	Spot Commodity Prices	Wholesale Prices			
				All Commodities	Farm Products	Foods	Other than Farm & Food
Jan. 10	....	180.20	351.4	164.5	197.0	182.1	146.9
17	....	177.24	351.2	165.5	201.5	181.2	147.4
24	....	171.67	349.7	164.4	199.2	177.4	147.6
31	....	175.05	347.6	163.7	195.1	176.5	148.0
Feb. 7	....	169.79	324.5	163.8	195.5	177.9	147.8
14	....	166.18	319.6	159.7	180.9	173.3	147.5
21	....	167.60	320.6	159.2	181.7	170.3	147.5
28	....	167.30	317.1	159.2	182.8	170.5	147.3
Mar. 6	....	168.94	321.4	160.4	187.6	172.2	147.3
13	....	167.62	316.4	159.8	184.9	171.2	147.3
20	....	173.12	315.3	161.5	187.6	176.4	147.3
27	....	173.95	316.6	161.1	186.2	174.8	147.4
Apr. 3	....	177.45	317.9	160.0	183.9	172.4	147.7
10	....	179.48	321.3	160.6	183.1	174.5	147.9
17	....	180.38	322.5	162.9	189.2	178.8	148.3
24	....	183.20	318.8	163.6	188.9	180.4	149.0
May 1	....	180.28	318.1	162.6	186.9	177.5	148.7
8	....	182.50	319.6	161.9	184.0	174.8	148.9
15	....	190.25	321.0	163.5	187.9	178.9	149.0
22	....	190.00	323.5	163.5	189.2	177.2	149.2
29	....	190.74	325.0	164.4	193.0	178.0	149.3
June 5	....	190.18	327.9	164.2	192.4	178.0	149.3
12	....	192.96	330.3	164.9	193.5	180.1	149.3
19	....	191.65	330.5	—	—	—	—

## A Republican Market?

Railroad shares, spurred by passage of Bulwinkle law, lead  
stocks in renewed upsurge. Farm and food products recover most  
of February price losses; industrial commodities reach new peak.

Railway shares this week were trying  
manfully to lead the young bull market  
up into new high ground.

Food prices, at wholesale, had very  
nearly recovered all the ground lost in  
the February commodity break; farm  
products presented an uneven front, but

steers were selling at record highs and  
cotton near the year's best levels.

And the cost of living, between mid-  
April and mid-May, moved up to a new  
high more than 70% above the 1935-39  
average.

There, in a nutshell, is an analysis of  
the pressures that are boiling up under  
prices. But of perhaps even more sig-  
nificance to the businessman is the fact  
that the cost of the things he buys is  
leading the parade; wholesale prices of  
commodities other than farm and food  
products topped their January peak  
more than two months ago.

• **Uneven**—Markets are not, of course,  
moving in unison. Stocks have scored  
much stronger gains since February  
than have commodities. The stock mar-  
ket, in fact, went off on its merry way  
while most commodities were still  
floundering about at their year's lows;  
in fact, security investment enthusiasm

### Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
<b>Stocks</b>				
Industrial	165.1	168.7	162.5	146.0
Railroad	51.3	50.8	51.0	40.7
Utility	73.7	73.9	73.4	73.8
<b>Bonds</b>				
Industrial	120.6	120.8	120.6	122.3
Railroad	108.4	108.0	107.9	107.3
Utility	118.0	118.4	118.6	113.4

Data: Standard & Poor's Corp.

was spurred in some measure by the apparent bursting of the commodity inflation bubble.

But stocks didn't turn down when commodities recovered equilibrium. The stock market bulls could see so much of a rosy nature in the business picture that they weren't turning back.

• **Higher Profits, Dividends**—The bulls sensed what the Federal Reserve Board printed this week as a prediction in its monthly Bulletin: Corporate profits in the aggregate this year will be higher than last; dividend payments will be larger, too.

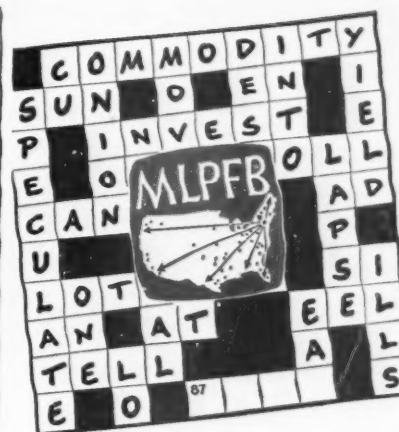
Market technicians are concerned, it is true, by what looks to be runaway speculation in the oils (box, below). Prices of some of these shares had been bid up so rapidly in recent sessions that analysts feared "air pockets" might develop—and that this, in turn, might cause a wave of selling to rake the entire market.

Even so, Wall Street had its eyes as

much on the news from Philadelphia as on the stock ticker. Buying coming onto the trading floor had old timers talking of a Republican market—something they have yearned for many years.

• **Bulwinkle Law**—Rails were whooping up on a Bulwinkle-law spree. Passage of this legislation over the President's veto (page 22) will take some of the uncertainty out of rate making. And the conviction that there will be a Republican administration next year encouraged investors to feel that, hereafter, there will be less trust-busting of the sort represented by the now-deflated suit against the carriers.

Talk in market circles, nevertheless, is not of a return to the free and easy days of 1926-29. Yet there is a strong feeling that 1949 will see less quarreling about big business and big profits than under the New Dealers. There is even the still small hope that stock margins may be lowered and venture capital encouraged.



87 across

...opposite of fiction

It doesn't take a dictionary to tell you the one thing needed to finish this puzzle is FACT.

FACT fits — there's no substitute! Sound investors in securities already know what we're driving at. Because FACT—the complete story on any company or stock—is vital to their investment decisions.

That's why we stress "Investigate then Invest" so strongly. That's why we advise any investor to get all the available facts on any stock or company—first! And that's why we do our best to keep investors informed on any changes in that factual picture afterwards.

Keeping in constant step with those changes is our large and experienced Research Department. Its extensive staff constantly gathers and gives out information of interest to any investor. It digs up facts asked for in hundreds of letters, and periodically publishes both the good and bad about whole industries and individual securities.

Merrill Lynch *doesn't* offer specific advice unless specifically asked. But if you're puzzling over present investment opportunities, we *will* help fill in the facts . . . send all the information we have on a particular security or confidentially analyze your present holdings—at no charge. Why not call or write—today?

Department S-9

**MERRILL LYNCH.**

**PIERCE, FENNER & BEANE**

*Underwriters and Distributors of  
Investment Securities*

*Brokers in Securities and Commodities*  
70 Pine Street, New York 5, N. Y.

*Offices in 96 Cities*

## Wall Street Strikes Oil

For all their recent gains, most stocks are still well below the peaks they hit in the 1946 and 1937 bull markets. They are still further from their 1929 tops.

There's one mighty exception: oil. Reflecting the industry's record-breaking earnings and bright outlook (BW—May 15 '48, p. 107), oil shares are making price-boom history.

Many oil stocks have already eclipsed even their 1929 highs. Many have zoomed to levels 100% to 271% above their lows of last

year. And 20 issues have chalked up a combined rise since the 1947 year-end of some \$1.7-billion in their market valuation.

How long will the boom last? It's your guess. But some brokerage quarters are beginning to feel queasy about the answer. A lot of the recent buying in oils, they report, has been of the "emotional" variety. In the past, this speculative kind of buying has often forecast a change in the price trend.

The tabulation below shows how far oil issues have advanced:

Stock	— Previous Bull Market Highs —			1947 Low	1948 High	Percent gain 1948 vs. 1947
	1929	1937	1946			
Amerada Petroleum.....	\$40.00	\$62.75	\$91.50	\$73.00	\$121.00	67.1%
Atlantic Refining.....	77.87	37.00	51.50	31.12	48.37	55.4
Barnsdall Oil.....	49.12	35.25	31.00	20.75	44.62	66.8
Gulf Oil.....	104.50	63.50	78.00	57.50	81.00	40.9
Humble Oil.....		43.50	75.25	55.25	88.00	59.3
Lion Oil.....	19.50	17.00	24.37	19.62	55.50	182.9
Ohio Oil.....	40.00	22.87	29.62	21.00	43.00	104.8
Phillips Petroleum.....	47.00	64.00	73.25	50.50	77.50	54.5
Plymouth.....	37.00	29.87	29.75	21.00	70.75	236.9
Pure Oil.....	30.75	24.87	28.87	21.25	42.00	97.6
Richfield Oil.....		10.75	20.37	23.75	49.00	106.3
Seaboard Oil.....	69.37	54.12	39.50	23.00	59.50	158.7
Shell Union Oil.....	31.75	34.75	43.75	24.50	46.75	90.8
Sinclair Oil.....	45.00	17.87	20.75	14.00	32.25	130.4
Skelly Oil.....	46.50	60.62	85.50	65.00	160.00	146.2
Socony-Vacuum Oil.....	21.00	23.25	18.25	13.75	23.00	67.3
Standard Oil (Calif.).....	81.87	50.00	59.62	50.75	73.00	43.8
Standard Oil (Ind.).....	68.75	50.00	49.75	37.25	53.00	42.3
Standard Oil (N. J.).....	84.87	76.00	78.75	63.00	92.87	47.4
Sun Oil.....	65.37	91.00	65.37	51.00	70.50	38.2
Sunray Oil.....	12.00	5.00	14.00	7.87	15.62	98.5
Superior Oil.....		55.00	160.00	101.50	235.00	131.5
Texas Co.....	71.87	65.12	68.25	53.75	67.00	24.7
Texas Pacific Land Trust..	32.37	15.37	26.50	15.75	48.50	271.4
Tidewater Associated Oil..	23.50	21.75	24.12	18.00	32.50	80.6
Union Oil.....	57.00	28.50	29.00	20.00	35.50	77.5





## The clock decides

Time is often the costliest ingredient of the product. When a 'Budgit' electric hoist does the lifting it saves so many minutes each hour that, in many installations, it pays for itself quickly—invariably it earns its way to bigger profits. With the saving of time it also increases production by making the job much easier for the worker. No installation costs! Hang up, plug in and use. Current cost is trifling. *Write for Bulletin No. 371.*

Made in sizes to lift 250 to 4000 lbs. \$119 up.



## 'BUDGIT' Hoists

MANNING, MAXWELL & MOORE, INC.  
MUSKEGON, MICHIGAN

Builders of 'Show-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments.



## NEW!

Makes Copies  
of Large  
Originals  
2 to 20  
times  
**FASTER!**

**HUNTER**  
PHOTO Copyist

Copies perfectly anything written,  
printed, typed, drawn . . .  
without a single error!

Yet operation of this new office size photo-copying machine is so simple that your office boy can handle it. Easily! Accurately! Economically!

Saves hours of copying work in  
offices, banks, plants

In little more than a minute, the Hunter Photo-Copyist reproduces large originals like balance sheets, analyses, floor plans, sketches, maps and many subjects other methods can't reproduce. It also copies smaller forms, like checks, letters, bills, either by putting them in "gangs" or singly on the ground glass. Every reproduction in photo-clear . . . actual size . . . often sharper than the original.

Any office can afford the modern Hunter Photo-Copyist. It actually pays for itself in a few months. Sizes for all purposes.

**WRITE TODAY for free samples of Hunter Reproductions . . . or phone your nearest Hunter Distributor.**

**HUNTER PHOTO-COPYIST, INC.**  
101 Hunter Ave. Syracuse, N. Y.

# LABOR



EMBATTLED AND PERPLEXED, the coal miner and his employer wonder . . .

## How Long Can This Go On?

Mines have been in constant uproar for a full year as Lewis fights T-H law, presses for nation's best labor agreement.

This week, John L. Lewis brought a 12-month labor crisis in coal to a climax. These are its elements:

(1) Judge Goldsborough decreed that a \$100-per-month pension for all U.M.W. members who reached the age of 62 by May 29, 1946, is legal. That ruling undercuts the coal operators' objection to activating the 1947 welfare fund on Lewis' terms; it makes almost imperative a boost in the 10¢-a-ton royalty rate to finance the outlays.

(2) Lewis, teamed with Sen. Styles Bridges, has a working majority with which to dominate the administration of the welfare trust. He can implement the Goldsborough decision with immediate pension payments.

(3) His intransigent demands for concessions in a 1948 contract halted negotiations, got them resumed on

terms which he had set: Pensions must be accepted before a contract can be discussed.

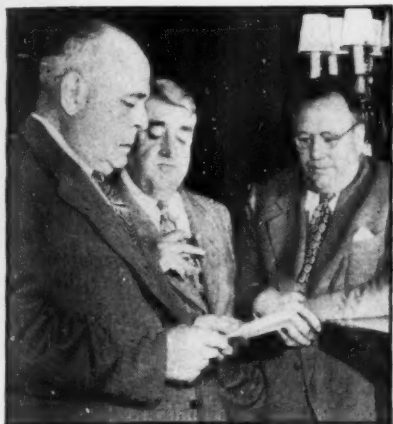
(4) A fact finding board has completed its canvass of the dispute and has put the question of what the government should do squarely up to Truman. Needing warm labor support in this election year, Truman has a problem as hot as a glowing clinker.

(5) And nothing anybody can do will keep the mines operating next week. The miners are going to be on a vacation provided under the expiring contract. Everybody except Lewis was stewing at midweek over whether the pits will be working again on July 6.

• **Here We Go Again**—A picture review of the year's maneuvers—which bring coal now back to the climactic point of last summer—starts on the next page.



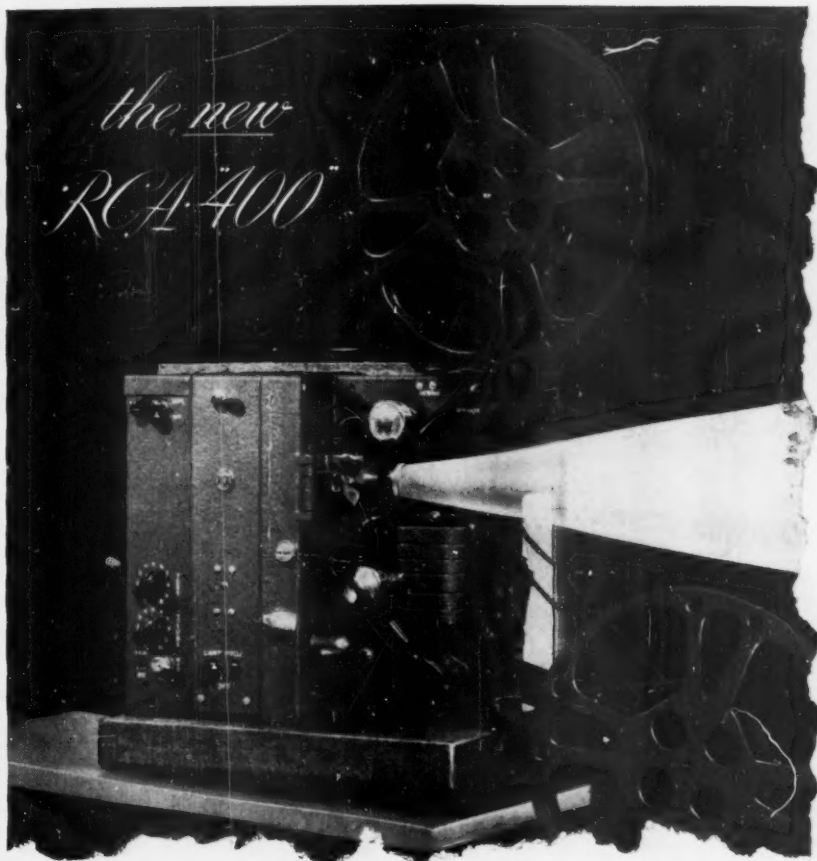
**1** Sec. of Interior Julius Krug stepped out as coal mine administrator when federal Smith-Connally law seizure powers ended July 8, 1947, and . . .



**2** Private operators were back in possession of their properties. Their spokesmen—Van Horn, O'Neill, Moses—agreed to establish a new (1947) welfare fund: royalty, 10¢ a ton. They left disbursement of the fund to three trustees. Still, the pension issue wasn't settled. It flared anew when trustees couldn't agree, and . . .



**3** Neutral trustee Thomas Murray gave up in disgust on Feb. 3, 1948. He blamed trustees Lewis and Van Horn for creating a stalemate (TURN TO PAGE 102)



## A completely new standard of 16mm performance

• **Thousands** of businesses, schools, churches, clubs and homes, from coast to coast, are enjoying today a new kind of 16mm performance. The RCA "400," the finest 16mm projector RCA has ever built, is revealing what professional quality performance really means.

### *Brighter Pictures!*

Never before have you seen 16mm black-and-white or color screenings so brilliant, so rich in contrast and definition. Pictures are clear and steady. Performance is finer in every way.

### *Theatre-like Sound!*

You enjoy sound or silent projection by merely turning a knob. Voices, music and sound effects are reproduced with the dramatic realism and tone shadings of theatre-like sound.

### *Easier Operation!*

Above all, the RCA "400" is so easy to use. Even a child can operate it. The correct film path is embossed on the side of the projector. The RCA "400" is the easiest and quickest of all sound projectors to thread. Lighter weight, high strength materials plus simplified design make possible a lighter weight projector.

### *See It . . . Hear It!*

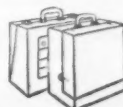
Words cannot tell the complete story. You must *see* and *hear* the RCA "400." Compare it . . . judge it! Before you buy any projector, make a *proof-test* with your own 16mm sound films. For descriptive brochure and name of nearest dealer—write: Sound and Visual Products, Dept. 16 F-V, RCA, Camden, N. J.

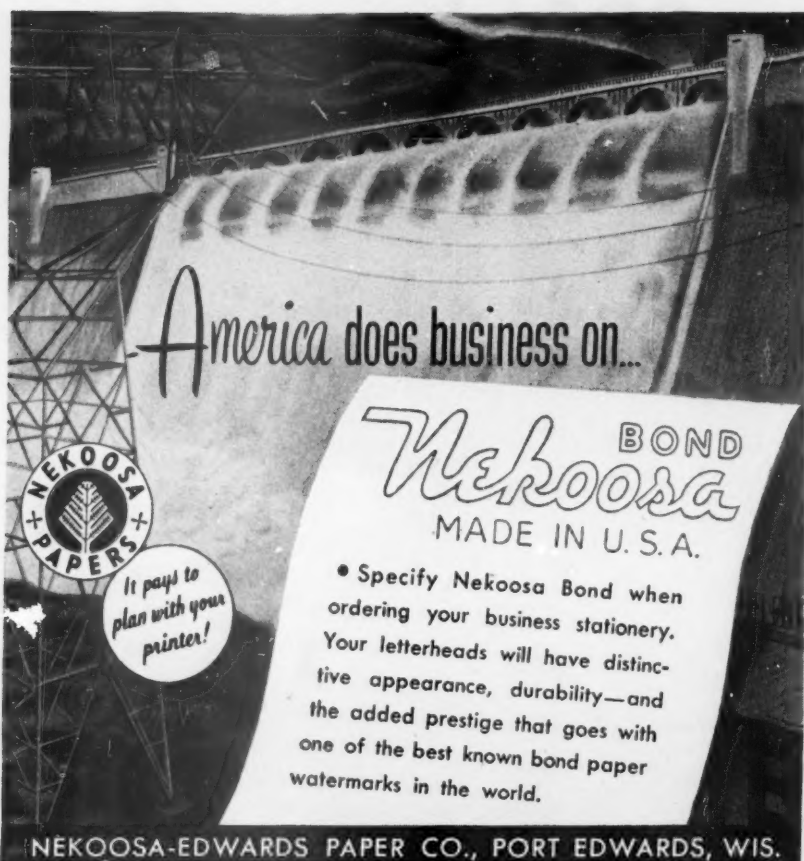
first in sound . . . finest in projection



**SOUND AND VISUAL PRODUCTS**  
**RADIO CORPORATION of AMERICA**  
ENGINEERING PRODUCTS DEPARTMENT, CAMDEN, N. J.

In Canada: RCA VICTOR Company Limited, Montreal





America does business on...

**NEKOOSA BOND**  
*Nekoosa*  
MADE IN U.S.A.

• Specify Nekoosa Bond when ordering your business stationery. Your letterheads will have distinctive appearance, durability—and the added prestige that goes with one of the best known bond paper watermarks in the world.

It pays to plan with your printer!

NEKOOSA-EDWARDS PAPER CO., PORT EDWARDS, WIS.



#### A SELF-CONTAINED PNEUMATIC FORGING HAMMER

Self-contained motor compressor and hammer in one unit. Anti-friction bearings, clean, low-center-of-gravity construction, improved long ram guides are valuable features. Its greater forging output is due to heavier anvil construction, higher impact speeds and greater rapidity of blows.

Further details in Bulletin No. 16-L-7

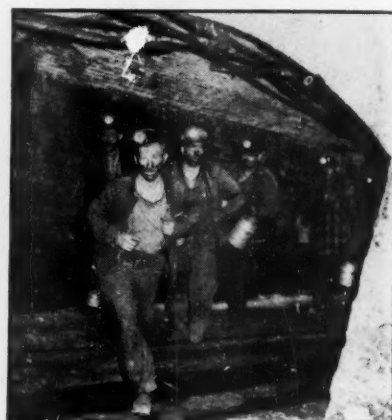
CHAMBERSBURG ENGINEERING CO., CHAMBERSBURG, PA.

## CHAMBERSBURG

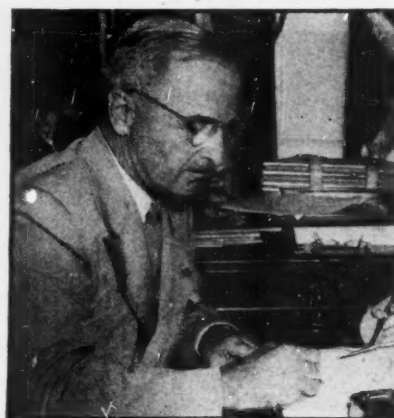
Builders of **IMPACT** Machinery



**4** Undeterred, Lewis pressed pension demands with a warning of United Mine Workers' "independent action." Later, on March 12, 1948, he announced angrily that he considered the pension contract "dishonored" by operators. Three days later...



**5** Miners began leaving soft coal pits. Day by day the stoppage spread, soon tied up all mines, caught industry with its fuel down. The federal government intervened when...

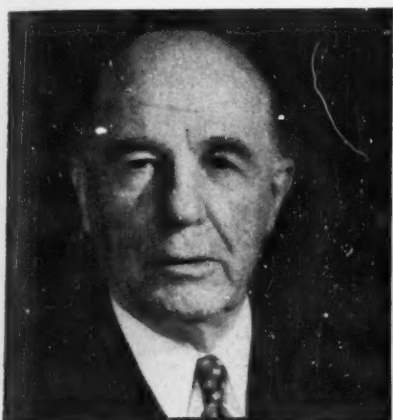


**6** President Truman invoked the Taft-Hartley law provision for dealing with "national emergency" strikes. His first step on Mar. 24, 1948, was naming a fact-finding board to study the issues. Its members...





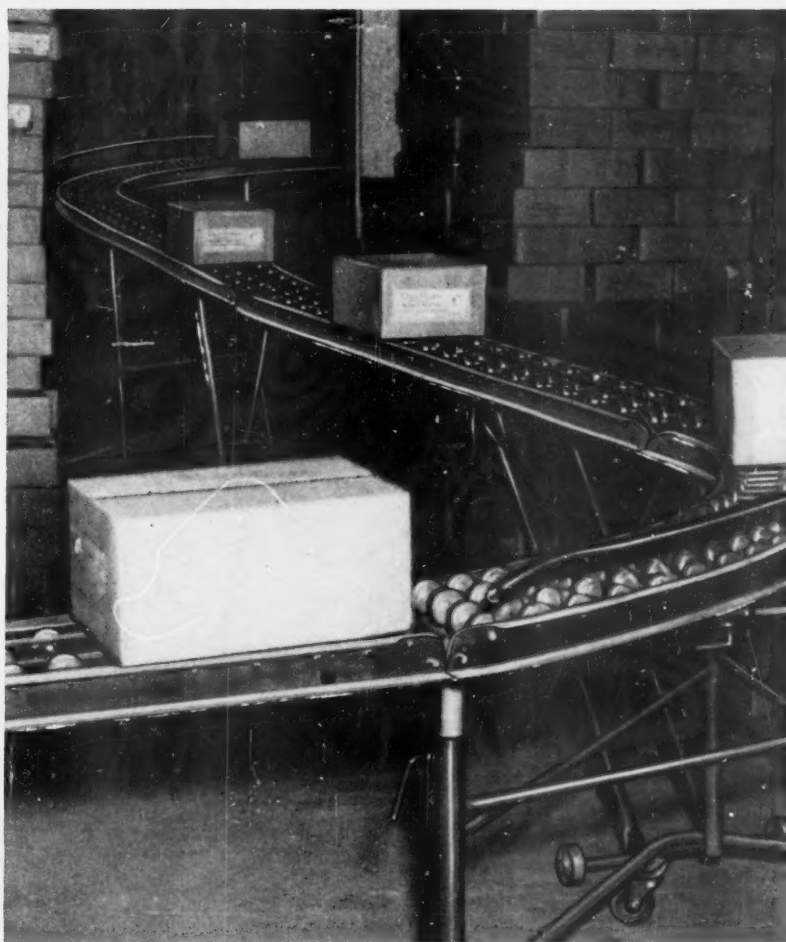
**7** Sherman Minton, Dr. George Taylor, and Mark Ethridge, told the President that Lewis was responsible for the stoppage—whether or not he actually ordered a strike. The Justice Dept. then went into action, and . . .



**8** Judge Goldsborough entered the dispute. First he enjoined the miners' walkout. Then he jerked Lewis and his union into court again on contempt charges as the strike continued. Meanwhile . . .



**9** House Speaker Joseph Martin intervened—a move that brought outcries of "Republican politics." At his urging, Lewis and Van Horn agreed on Sen. Styles Bridges as third pension-fund trustee (TURN TO PAGE 104)



## The business curve has changed

Here's a business curve that may show a 30 to 70 percent reduction in the cost of handling your cartons and boxes. It's the Rapid-Wheel® gravity conveyor curve. Together with Rapid-Wheel straight sections, it loads and unloads cars and trucks or moves materials in and out of storage in record time with a minimum of manpower at lowest cost.

Rapid-Wheel gravity conveyor is available for immediate delivery in either steel or aluminum. Straight sections, curves, spurs and switches are offered in lengths and wheel arrangements to fit your particular job.

Write today for details on Rapid-Wheel gravity conveyor or other Rapids-Standard material handling equipment.

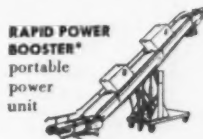
\* T. M.



The RAPIDS-STANDARD CO., INC.  
306 Rapistan Bldg. Grand Rapids, 2, Mich.  
Representatives in principal cities



**RAPID-ROLLER® CONVEYOR**  
for heavy-duty gravity service



**RAPID POWER BOOSTER®**  
portable power unit



**RAPIDS-STANDARD**  
quality casters  
for industry

# RAPISTAN

MATERIAL HANDLING EQUIPMENT



THE *Multiple-Purpose*  
FLOOR-MAINTENANCE MACHINE THAT'S  
*Two Sizes in One!*

Here is a floor-maintenance machine that not only can be used for many types of floor care, but also affords the further economy of a machine that is two sizes in one. This 100 Series Finnell, in one of the larger sizes as shown above at left, can be reduced to the small size unit shown in circle.

Note the low, trailer-type construction of the machine, and how easily it goes beneath furnishings. Thus it is ideal for use in crowded areas of factories and textile mills, and in offices, schools, and hospitals. In fact, the dual size feature and low construction of the machine adapt it to use on many floors otherwise inaccessible to machine care.

As easy to handle as a household vacuum cleaner, yet this Finnell is powerful . . . fast . . . and thorough. Mounts a G. E. Drip-Proof Capacitor Motor . . . is equipped with Timken Bearings. And the ruggedly constructed worm drive, housed in an extra-capacity leak-proof gear case, lubricated for 1500 hours, assures smooth, noiseless performance. A precision product throughout. Three sizes: 13, 15, and 18-inch brush diameter.

The nearby Finnell man is readily available for training your maintenance operators in the proper use of Finnell equipment. For consultation, free floor survey, demonstration, or literature, phone or write nearest Finnell branch or Finnell System, Inc., 3806 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.



**FINNELL SYSTEM, INC.**

*Pioneers and Specialists in*  
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES  
IN ALL  
PRINCIPAL  
CITIES



With Water Tank and  
Vacuum for Rug Scrubbing



With Dispenser  
for Hot Waxing



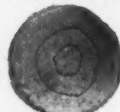
Interchangeable  
Brushes, Pads,  
Sanding Disc



Wire Brushes



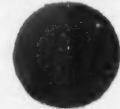
Fibre Brushes



Polishing Pad



Steel-Wool Pad



Sanding Disc



**10** Bridges and Lewis quickly approved \$100-a-month pensions for 62-year-old miners out of the 1946 fund. Van Horn dissented, calling the action uneconomic, illegal under the T-H law. Throughout the soft-coal fields . . .



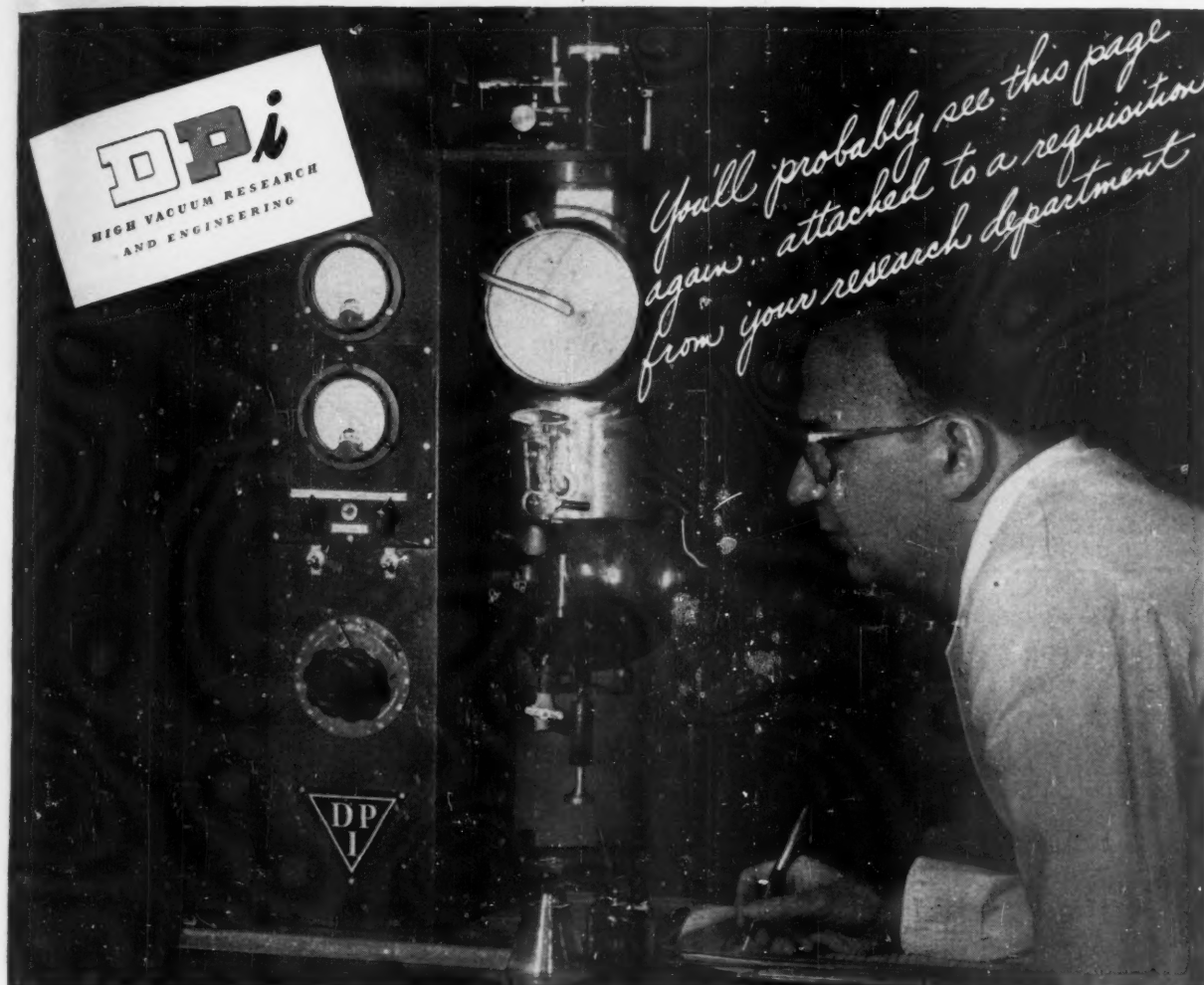
**11** Miners cheered the victory as Lewis reported the pension dispute settled satisfactorily. Union men returned to the diggings—but too late for Lewis and the U.A.W. to avert a stiff contempt fine. Meanwhile . . .



**12** The National Savings & Trust Co. of Washington, was served with a court order by Van Horn; it was designed to prevent withdrawals pending a test of legality (TURN TO PAGE 106)

**DPi**  
HIGH VACUUM RESEARCH  
AND ENGINEERING

*You'll probably see this page  
again... attached to a requisition  
from your research department*



## A New Tool for Research--CMS "5"

**H**IGH-VACUUM Molecular Distillation in the research chemist's hands made obsolete such terms as "fixed" fats—and called for a new definition of the word "undistillable".

With High-Vacuum Molecular Distillation, an untold wealth of new fractions are cheaply available—awaiting research for profitable commercial applications.

It is molecular distillation that produces high-potency, stable Vitamin A from fish liver oils; that extracts a guaranteed Vitamin E from natural vegetable oils; that increases yields in the production of high-quality, low-volatile plasticizers, etc.

Under high-vacuum distillation, many waste materials or by-products

**For the first time a High-Vacuum Centrifugal Still designed especially for laboratory use—operating like the large-scale commercial units—now available at moderate cost!**

are converted into valuable commodities. Among the fields where molecular distillation is already being used as a low-cost unit process, are: Oils, Plasti-

cizers, Resins, Perfumes, Drugs, Vitamins, Sterols, Hormones, Extracts, Fatty Acids.

The CMS "5" lab still is *compact* (3 sq. ft. by 32" high); *versatile* (handles up to 1½ liters); *reliable* (lowest thermal hazard yet secured); *simple in operation* (3 dials, 4 switches); and *inexpensive*.

For further information on this fine, new research instrument write—

**DISTILLATION PRODUCTS, INC.**

739 RIDGE ROAD WEST • ROCHESTER 13, N. Y.



*Manufacturers of Molecular Stills and High-Vacuum Equipment; Distillers of Oil-Soluble Vitamins and Other Concentrates for Science and Industry*



**SAFEGUARD**  
Checkwriters  
• NEW • ONE-PIECE  
**PIVOT KEYS**




Outstanding Improvement in Check Writing

Keys Incline Downward To See Up Amount In Full View

Easy action Keyboard allows simultaneous setting of different figures as on Adding Machine. Assures fast error-free check protection.  
Write today for full details.

**SAFEGUARD CORP.**  
LANSDALE, PA.

**INDUSTRIAL or COMMERCIAL  
PROPERTY FOR SALE or RENT**

of major interest to either local or distant prospects, ask for information about the

**NAT'L INDUSTRIAL  
REAL ESTATE BULLETIN**  
of BUSINESS WEEK

### The Latest News of Science Now Yours in One Big Magazine!

Now at last you can keep up with the new inventions and discoveries of science that affect you and your industry. Every month *Science Illustrated* is filled with new advances in vital fields...Electricity, Construction, Aviation, Atomic Energy, Radio, Synthetics, Mining, Chemistry, Electronics, Home Appliances, etc.

*Science Illustrated* shows you new products and designs and explains why, when and how they were made. Every monthly issue is packed with 30 complete, authentic articles and 140 photographs, diagrams.

#### ORDER NOW AND SAVE \$4!

You can order 36 big issues of *Science Illustrated* (3 full years) for **ONLY \$5!** This special rate saves you \$4 over the one-year price. We'll start your subscription with the big new issue now on the press—if you order within 10 days!

#### MAIL THIS ORDER FORM TODAY!

*Science Illustrated*  
330 West 42nd Street, N. Y. 18, N. Y.

YES! I accept your special offer. Start my subscription to *Science Illustrated* with the new issue now on press.

- ☐ I prefer 2 yrs. at \$4 (Saves me \$2 compared with the 1-yr. rate)  
☐ I prefer 3 yrs. at \$5 (Saves me \$4)  
☐ I prefer 1 yr. at \$3  
☐ Bill me later ☐ Payment enclosed

Name \_\_\_\_\_

Address \_\_\_\_\_

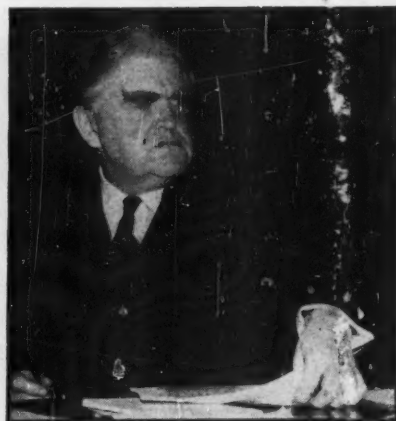
City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_

ALSO ON SALE AT ALL NEWSSTANDS 25¢

BW-6-26



**13** Lewis still wasn't through with the operators. He made new demands: Tap the 1947 fund so pensions can continue; provide other welfare benefits; negotiate a new contract before June 30, 1948



**14** Joseph Moody, of the Southern Coal Producers Assn., became a controversial figure as new talks began. Lewis didn't want to bargain with Moody—who was certain to resist his demands. He called on . . .



**15** Big Steel's Fairless and Pittsburgh Consolidation's Humphrey to settle for the industry and to insure against steel mill closings. They refused while soft-coal men stood pat, and . . .



**16** Goldsborough, called on again, ordered Lewis to bargain with Moody and the others—to no avail. When another strike threatened, Truman named a second fact-finding board



**17** Again Bridges and Lewis ordered pensions paid—this time out of 1947 fund. Goldsborough wouldn't enjoin them. Unless operators appealed, payments could begin—but could the fund support them? Operators pondered this as . . .



**18** Miners quit shafts for one-week paid vacations this week end—provided in the expiring contract. The big question: Will there be a "no contract, no work," situation on July 6, when they are supposed to come back?

# HEAT PROCESSING COSTS REDUCED 75% with **GAS** VULCANIZING OVENS



Charging one of the five Gas-fired Gehrich vulcanizing ovens with a truckload of Allison abrasive cutting wheels. Note Bristol recorder and program controller which govern heat processing cycles.

Part of the battery of 21 steam jacketed ovens which were replaced with Gas-fired ovens.



COST REDUCTION is only one of the advantages in the use of GAS for heat processing at The Allison Company, Bridgeport, Connecticut.

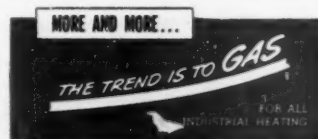
In fact, the conversion to modern GAS Vulcanizing Ovens resulted in the following important operating and product advantages, as well as in cost reduction:

- Improvement in the uniformity of the product
- Extension of research facilities to production basis due to accurate heat control
- Elimination of maintenance on steam piping and oven jackets
- Reduction in handling expense

Allison Abrasive Cutting Wheels are high-speed production tools made by bonding sharp abrasive cutting grains in discs with a vulcanized rubber adhesive. In that vulcanizing process GAS performs its vital function—supplies heat at the precise temperature and for the exact length of time required for perfect bonding.

Accurate temperature regulators and simple, time-cycle program controls, have eliminated the human element in the vulcanizing process—have convinced Allison Company executives that GAS, and modern Gas Equipment, really team-up to provide economical, dependable heat processing. Wherever you use heat in production processes there's a place for GAS; your local Gas Company Representative can assist you in applying modern Gas Equipment.

**AMERICAN GAS ASSOCIATION**  
420 LEXINGTON AVENUE, NEW YORK 17, N. Y.





That's just what happens when you install powerful, new Whiting Electric Hoists in your plant. Each of these units handles loads up to two-tons, 13 times as fast as a hand hoist . . . releasing men and machines for productive work.

What's more, maintenance costs are kept to a minimum. Because of their simple, worm-gear design, Whiting

Hoists have fewer parts to wear . . . fewer parts to maintain.

Your workers will like them, too. These new hoists make it a simple matter to lift and move back-breaking loads . . . anywhere in the plant.

You'll find it will pay you to learn how Whiting Hoists can save time and money in your plant. Send for the facts.

**If It Saves One Man Only 12 Minutes a Day . . . IT PAYS A PROFIT!**

# WHITING ELECTRIC HOISTS

**1/4, 1/2, 1, and 2-Ton**

**Write for Bulletin H-100A**



ONE-TON  
COSTS ONLY  
**\$230.00**  
F. O. B. Harvey, Ill.

## WHITING CORPORATION

15661 Lathrop Avenue, Harvey, Illinois

- ☐ Send me a copy of your Bulletin H-100A describing the new Whiting Electric Hoist.
- ☐ Please send me the name of the Whiting distributor in my territory who can give me immediate delivery on a Whiting Hoist.

NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

## Uniform Hikes

Third-rounders follow 9¢-to-13¢ range pattern in auto, rubber, and electrical manufacturing settlements.

Third-round hourly wage boosts seem to be firmly fixed for three major industries. Auto, electrical manufacturing, and rubber settlements, with few exceptions, are falling into a general 9¢-to-13¢ range.

• **Autos**—More 13¢-an-hour raises in the auto industry came this week from Hudson, Packard, Nash, and the Budd Co. Only Ford tried to depart from the Chrysler pattern—but its offer, too, was close to the 13¢ line. Ford proposed 14¢ raises for employees earning more than \$1.50 an hour, 11¢ for those getting less. It said the difference would "erase many of the inequities in [the present Ford] wage structure."

The United Auto Workers balked at the Ford terms. The union wants a flat increase for all workers, additional amounts to adjust inequities.

Meanwhile, auto labor-management was watching latest cost-of-living index figures (page 26). They show a 1.2 point increase for May—a gain that could boost General Motors' wages at the quarterly review on Sept. 1 (BW—May 29'48, p96).

In the farm equipment field, International Harvester offered its 60,000 employees 11¢. J. I. Case offered an 8% increase.

• **Electrical Manufacturing**—The United Electrical, Radio & Machine Workers (C.I.O.) this week settled with Westinghouse Electric Corp. for an 8% increase—the figure at which General Electric settled two weeks ago (BW—Jun. 12 '48, p26). Raises will range from 9¢ to about 16¢ an hour. The two-year contract can be reopened so far as wages are concerned in 1949. There's nothing to prevent a strike for a raise at that time.

U. E. wasn't the only one to take the 8% pattern. The General Cable Corp. settled at that figure with an A.F.L. union—the International Brotherhood of Electrical Workers (A.F.L.).

• **Rubber**—Goodyear Tire & Rubber Co. this week was the second of rubber's Big Four to agree on an 11¢ raise. This figure was set originally as a modification of the G. M. pattern; it had been adopted by Firestone Tire & Rubber Co. and United Rubber Workers (C.I.O.). Goodyear threw in three-week paid vacations for workers with 15-year seniority; also included one-week termination pay for every year of seniority for those workers released because of old age or disability.





# Ends Manual Transcription On Every Job!

**A simple practice**—the use of ordinary translucent paper instead of the opaque kind—ends manual transcription in your office.

Type, draw, or write—in usual manner—but now every sheet of paper is a “master”—ready for immediate Ozalid reproduction.

Manual transcription...proofreading...and mistakes are eliminated for good.

## ACCOUNTING—without manual transcription

Your work sheets and ledgers—on translucent paper—can be reproduced by Ozalid in 25 seconds (avg.). Each Ozalid print is an exact-size, positive copy... as easy to read as the original.

Composite reports can be prepared from separate translucent sheets—without lifting a pen, without one error in transcription.

Thus, information can be passed on immediately—in its original authenticity... without retyping.



## FILING—without manual transcription

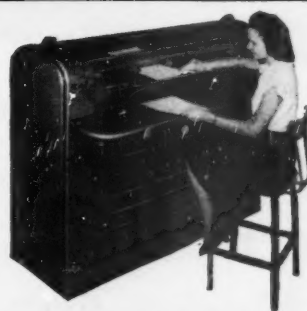
Post in the usual manner—on ordinary translucent cards... and your files become “alive.” Whenever information on an account is desired, you simply place the translucent card on a sheet of Ozalid paper... and feed into your Ozalid machine. Out comes a positive (not negative) copy... in seconds... without error... with less than a penny spent.



## REPORTS—without manual transcription

Sales, service, or other reports on translucent paper can be reproduced as soon as received. And no limit to the number of Ozalid copies you make. Practically no size limits—translucent sheets can be up to 42 inches wide, any length. Use Ozalid to copy manifold accounting machine reports, advertising layouts, etc., if you wish.

**Note:** 8 out of 10 letters, invoices, etc. you receive are sufficiently translucent to produce file or pass-on copies.



## New Free Booklet!

“The Simplest Business System” tells the whole story—lists 116 job-by-job savings you can realize with translucent papers and Ozalid. Write for it today!



## OZALID

A Division of General Aniline & Film Corporation,  
Johnson City, New York Dept. 122

Gentlemen: Please send free copy of “The Simplest Business System”... fully explaining the savings realized by using translucent papers and new Ozalid Streamliner.

Name \_\_\_\_\_ Position \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_

Ozalid in Canada—Hughes Owens Co., Ltd., Montreal

*faster . . . easier . . . more efficient*



**The Revolutionary New**

## **FILM-A-RECORD READER DESK**

- So fast that in 60 seconds or less you can  
locate any image on a Microdexed roll of microfilm.
- So easy to operate you just slip film between glass  
flats to load, flip adjustment wheels to focus  
or change image position, twist control knob to  
start film traveling up to 150 ft. per min.
- So efficient that you can perform all operations  
without leaving your chair . . . stop or  
reverse film *instantly* . . . advance film with one  
hand and transcribe with other hand. Fixed focus  
at all readable speeds. Controlled and driven by  
one motor. For descriptive folder, write to Room 113,  
Photo Records Div., 315 Fourth Avenue, New York 10.



**Remington Rand**



**SUBCOMMITTEE HEAD** Mary Donlon  
warns T-H law isn't a final product

### **WOMAN ADVISES G.O.P.**

Republican platform-builders this week chose their Taft-Hartley law plank under the guidance of Mary Donlon—the party's first woman chairman of a resolutions subcommittee. Miss Donlon, for years a close associate of Sen. Irving Ives in New York, warned that the T-H law mustn't be regarded as a finished product. She urged that the party pledge to continue studying the law and change it whenever necessary.

The subcommittee adopted the plank as well as a big part of Miss Donlon's other recommendations on labor, social security, welfare, health, and housing. Most of the program got into the final draft of the platform, adopted at the national convention this week in Philadelphia.

The subcommittee heard 30 witnesses in five-minute appearances. They included William Green of A.F.L., Van Bittner of C.I.O., Morris Sayre of the National Assn. of Manufacturers. All had suggestions; none was at all satisfied with the plank that finally came out of the subcommittee.

Miss Donlon was vice-chairman of the subcommittee under Sen. Taft in 1944. She is Gov. Dewey's chairman of the New York State Workmen's Compensation Board.

**The Pictures**—Acme—20, 90, 102 (top), 103 (bot.), 106 (top right); American Cyanamid Co.—50; Harris & Ewing—22, 101 (top); Int. News—104 (mid.); Keystone—122; Silver Studios—95; Wide World—101 (bot.), 102 (mid., bot.), 103 (top), 104 (top), 106 (left, bot. right).

# "Dept. Store" for piping Materials ... the Complete Crane Line

Where can a Railroad, for example, get its diversified piping requirements? Piping for station buildings and shops . . . for power plants and right-of-way services . . . for locomotives and cars. Piping of brass, iron, steel, and alloys . . . for handling steam, water, oil, air, gas, and other fluids.

Railroads are typical of many industries served by Crane, whose piping requirements range from "A to Z." For them as for food, chemical, or petroleum plants, Crane is like a department store—a source of everything in piping equipment.

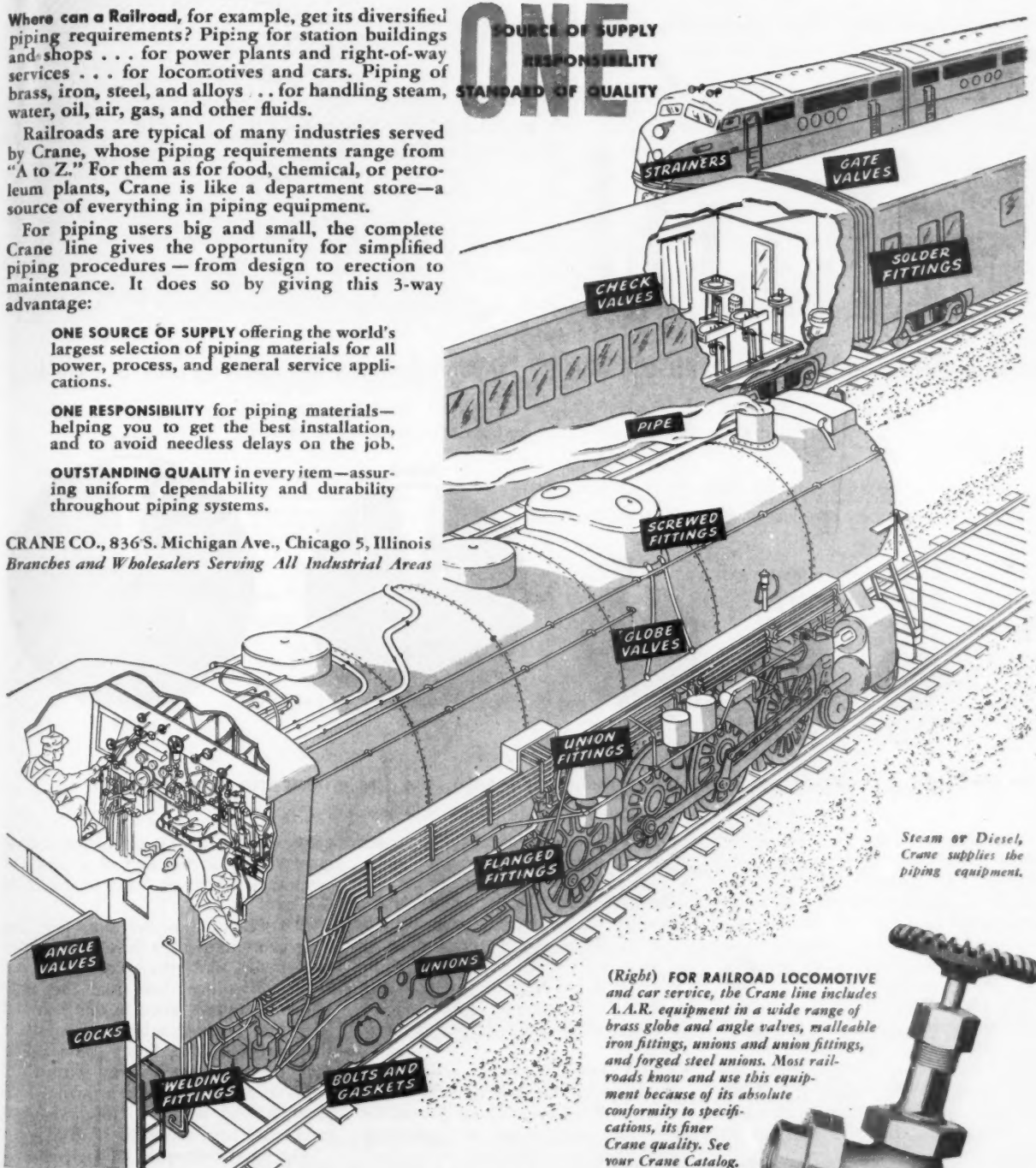
For piping users big and small, the complete Crane line gives the opportunity for simplified piping procedures—from design to erection to maintenance. It does so by giving this 3-way advantage:

**ONE SOURCE OF SUPPLY** offering the world's largest selection of piping materials for all power, process, and general service applications.

**ONE RESPONSIBILITY** for piping materials—helping you to get the best installation, and to avoid needless delays on the job.

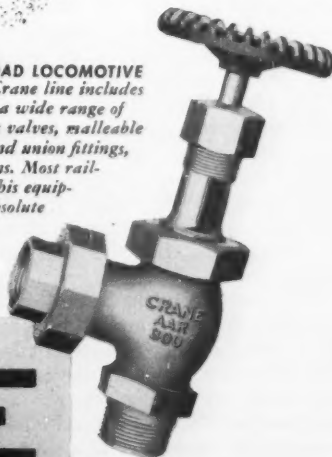
**OUTSTANDING QUALITY** in every item—assuring uniform dependability and durability throughout piping systems.

CRANE CO., 836 S. Michigan Ave., Chicago 5, Illinois  
Branches and Wholesalers Serving All Industrial Areas



Steam or Diesel,  
Crane supplies the  
piping equipment.

(Right) FOR RAILROAD LOCOMOTIVE and car service, the Crane line includes A.R. equipment in a wide range of brass globe and angle valves, malleable iron fittings, unions and union fittings, and forged steel unions. Most railroads know and use this equipment because of its absolute conformity to specifications, its finer Crane quality. See your Crane Catalog.



EVERYTHING FROM . . .

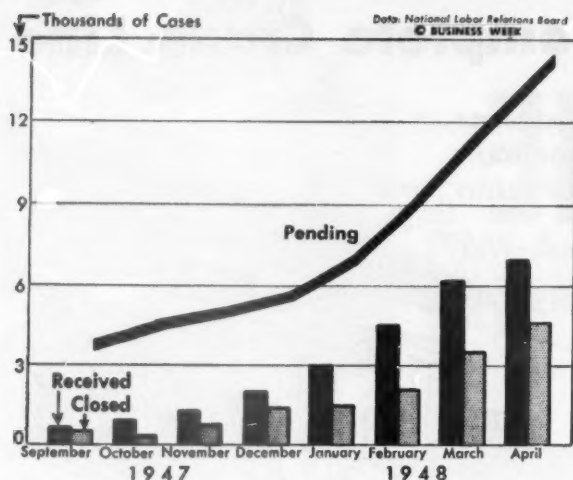
VALVES • FITTINGS  
PIPE • PLUMBING  
AND HEATING

# CRANE

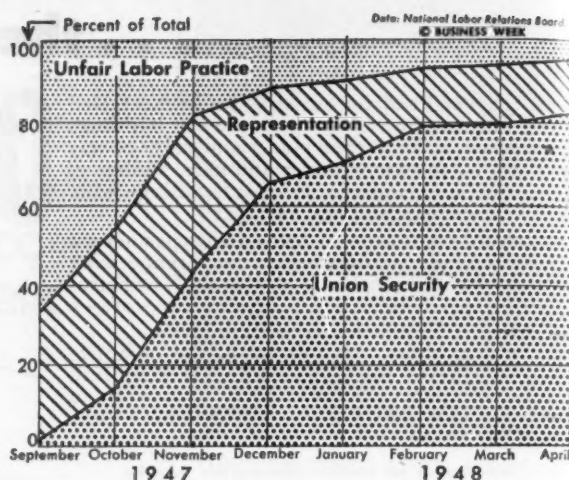
FOR EVERY PIPING SYSTEM



# NLRB's Case Load Under Taft-Hartley Act

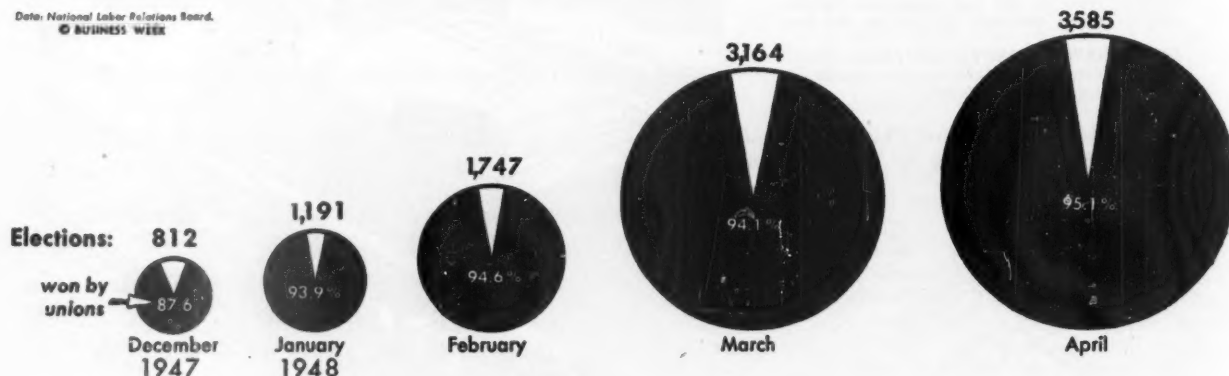


Board is getting further behind with case work



Union-security issues make up bulk of case load

Data: National Labor Relations Board.  
© BUSINESS WEEK



The elections it conducts get more numerous each month, and the unions win most of them

The first year of the Taft-Hartley act, which ended this week, brought few surprises. As expected, the two great hazards to the law's effective operation have proved to be: (1) the fact that the responsibilities of the National Labor Relations Board go beyond its capacities; and (2) the courts.

• **Too Much Work**—NLRB's mounting backlog—charted above over the period for which data are available—has not yet run the T-H law aground, as some of its critics predicted it might. But if the case-intake keeps on running far ahead of case-closings, there is real trouble ahead.

That problem might be dealt with by amending the law. The Ives amendment (BW—May 15'48, p109) was an effort in this direction; it would have relieved the board of conducting union-shop elections for unions which had filed non-Communist affidavits. It didn't reach the Senate floor because friends of the law were convinced that, with revision

of the T-H act on the calendar, the act might be amended to pieces.

The situation will probably be the same next year. Once Congress starts amending the act, anything can happen.

So it is likely that the problem of an overburdened NLRB will be tackled by giving the board more money to enlarge its staff. But an economy-minded House of Representatives may delay this indefinitely.

• **Court Test**—Meanwhile, the courts will be giving the law its real test.

The U. S. Supreme Court greeted the act's first anniversary by upholding Philip Murray in his attack on the law's ban of union political activity. In this case, the C.I.O. News had endorsed a candidate for Congress and the Justice Dept. had prosecuted. The high court avoided a broad declaration on the constitutionality of the political ban provision, holding Murray safe on the narrower ground of congressional intent. It was plenty, though, for the C.I.O. to

crow about. The unions hailed it as a great victory in the first of a series of cases they intend to bring to decimate the law.

In another action the same day, the high court refused to pass on the non-Communist affidavit requirement of the law. The justices held that the issue was not properly raised in the National Maritime Union case before them. But they did uphold a lower court ruling that the government was within its rights in demanding that a financial report be filed before a labor organization could have access to NLRB.

The non-Communist affidavit issue is likely to come before the court in a way it cannot duck in another case involving Murray. His steel union has satisfied every other T-H law requirement and is suing NLRB to proceed in its behalf. The board is holding out for an affidavit.

Several other basic issues are in the courts, too.

# INTERNATIONAL OUTLOOK

BUSINESS WEEK

JUNE 26, 1948



Our currency reform in Germany drives another wedge between Russia and the West.

Now the Soviets have rushed through a money move of their own. They were worried that the new western mark would seep into their territory—at a high premium.

This currency war will reach its peak in Berlin. The Russians say the whole city will have to use their money. The western powers disagree. They are making their new mark legal tender in the three western sectors of Berlin.

German currency reform has been hanging fire for two years.

It became a must for the western powers when they:

(1) Created a West German government.

(2) Put the European Recovery Program into operation. (Western Germany is slated for a big role in it.)

Up to now it has been impossible to deal with hoarding and black markets. Farmers and manufacturers have refused to put their goods on the open market. Reason: The old mark—an estimated 100-billion of tender in the western zones alone—wouldn't buy much.

Under the new set-up there won't be more than 10-billion marks outstanding. (At midweek the rate of conversion of old marks into new hadn't been announced.)

But this alone wouldn't give the new money real value. So the U. S. has been pumping key consumer goods into western Germany—60-million yards of textiles and 40-million pounds of tobacco in the past few weeks.

A good German harvest this year is expected to help, too.

And there will be additional moves on (1) the status of public and private debts; (2) tax reform; (3) equalization of financial burdens.

You can expect a sweeping German capital levy to:

(1) Equalize monetary losses from the currency reform between property holders and those holding money.

(2) Equalize war damage.

(3) Equalize losses by firms giving up property as reparations.

The West German banking system, plus a German RFC will make loans to firms that need working capital.

Meantime the moratorium on foreign investments in Germany is being lifted.

ECA is beginning its reconstruction program—now that relief activities are well under way.

Paul Hoffman has just O.K.'d \$6-million of industrial equipment for France and Greece. It will buy agricultural, electrical, and mining machinery.

But big shipments of industrial stuff won't get started until fall. Requirement lists for these goods are still in the making abroad.

Argentina won't get any ECA dollars after all—at least, not during the third quarter.

If Peron's economic czar, Miguel Miranda, wants to do any business with ECA after that, he'll have to underbid other suppliers.

As a result, Argentina's dollar shortage will continue. And so will

# INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

JUNE 26, 1948

the existing restrictions on goods imported from the United States.

President Dutra wants the Brazilian Congress to give him power to buy up all surplus homegrown foods.

He wants to sell the food abroad at world prices; or at home when there's a shortage. Buying and selling prices would be fixed by Congress. Profits, if any, would go into an industrial development fund.

Brazil's producers and traders are fighting the proposal. They say it's nothing but "Peronism without Peron."

There's some basis to rumors that Stalin will step down as Soviet premier. The Russian dictator is considering a shift back to his prewar role—when he wielded power by merely holding the reins of the Communist party. That way he can pick his successor while he's still alive.

Top members of the Politburo are fighting for the job already. The chief contenders: Molotov and Malenkov. (For background on this duo, see BW-May 15 '48, p22).

But a shift probably won't be made before the next meeting of the Communist party. That will be in early 1949. (The last was in 1939.)

Moscow is again predicting an economic decline of the West.

According to the Kremlin line, the crisis is imminent. It will strike the U. S., western Europe, and capitalist colonial possessions.

Moral for the Russian people: It won't be long before the USSR overtakes the U. S. economically.

Anglo-Iranian Oil Co. plans to build a 20-million barrel oil refinery on the Thames estuary. London reports say that Gulf Oil is in on the plan.

Government approval for the \$120-million project is expected soon. The big problem will be to get the steel.

Expansion of Anglo-Iranian's two existing refineries in Britain is already under way. Output at Llandarcy (Wales) should reach a rate of 6-million bbl. by the end of 1948, over 20-million by the end of next year. The Grangemouth plant is supposed to hit a 10-million bbl. rate by 1950.

U. S. companies continue to expand in Britain. And British firms are looking for openings in the U. S. Here are some recent moves:

**Burroughs Adding Machine, Ltd.,** will manufacture office machines—instead of merely assembling U. S.-built parts, as heretofore.

**Hoover, Ltd.,** is now producing electric washing machines in a new South Wales factory. The American parent company has turned over its operations in France, Belgium, Holland, and Switzerland to Hoover, Ltd.

**Alfred Herbert, Ltd.,** Coventry machine tool maker, plans to enter the U. S. market. Herbert is canvassing machine tool dealers here to see what the prospects are for its turret lathes and related tools.

**Dictaphone Co., Ltd.,** has been taken over by Dictaphone Corp. The reorganized British company will soon be making complete machines.

**S. H. Benson, Ltd.,** and **Mather & Crowther, Ltd.,** British advertising firms, have formed a U. S. company—Benson & Mather, Inc. They plan to promote sales of British goods and services—and pick up some of the \$30-million now spent annually on advertising British wares here.



# BUSINESS ABROAD



Pattern of pipelines in Arabia shifts as U. S. adopts . . .

## New Middle East Oil Policy

**Commerce Dept. stops shipment of pipe for Trans-Arabian pipeline because of growing Middle East tension. Emphasis is again on building tankers to bring Arabian oil from the Persian Gulf.**

Last week the U. S. government turned thumbs down—for a few months at least—on any more steel allotments for the 1,040-mi. trans-Arabian pipeline (Tapline). The decision was made by the Commerce Dept.'s Office of International Trade. Its reason was clear: The struggle in Palestine and growing U. S.-Soviet tension in the Middle East make Tapline a bad risk right now.

That doesn't mean the Middle East has been written off as a big source of oil for ERP—and, thus, as a buttress against a fuel famine in the U. S. It does mean a shift in transportation policy from pipelines to tankers.

• **No Surprise**—Tapline's management (Standards of New Jersey and California, Socony-Vacuum, and the Texas Co.) has known all along that it was skating on thin ice as regards steel allotments. So the news came as no surprise. Tapline officials say they have enough steel in Saudi Arabia now to get two legs of the project—some 157 mi. in all—running. They say they can keep their crews on the job for another four months.

One leg goes from the Arabian-American Oil Co.'s Abqaiq field north, 43.4-mi. along the Persian Gulf to the Qatif Oasis—where another Aramco

field is located (map, above). This section—independent of the over-all Tapline project—is the final link in a coastal collecting system which connects all major fields in the area to the loading port of Ras Misha'ab. This makes it valuable regardless of the final fate of Tapline.

The second leg of Tapline runs 114-mi. due west of Qatif to Abu Hadriya where Aramco is getting ready to open up another proven field. This leg is also of value outside Tapline. Abu Hadriya oil can either be pumped west to the Mediterranean (Tapline's eventual goal) or east to the Persian Gulf.

• **Steel Pipe Released**—But Tapline, as a long-range project, has definitely been shelved for a while. OIT's ban released for other uses 16,000 tons of steel that had been earmarked for Tapline. Of this, 11,600 tons have now been licensed to the Anglo-Iranian Oil Co. for pipe. The rest will be allotted for tanker construction and other uses here at home.

The domestic steel shortage and western Europe's dire need of oil forced the government's hand against Tapline. It would take about two years and some 400,000 tons of steel before Tapline

could start delivering oil at its Mediterranean terminus (Port Sidon, in Lebanon). And even that deadline couldn't be met unless the Arabs and Israelis bury the hatchet.

• **New Policy**—So OIT has changed its policy:

(1) Tanker transportation is again considered the best risk for moving oil out of the Middle East.

(2) When foreign sources show that they can deliver the oil faster, they will get some pipe. OIT says it wants to get the quickest results possible from the few steel allotments it can make to the Middle East. That is why Anglo-Iranian got the nod for a portion of Tapline's steel. Anglo-Iranian will use the pipe to connect its field at Aga Jari in Iran to the Persian Gulf. Oil wells have already been drilled at the field; dock installations are ready at the port. The only thing missing is the pipe.

• **Big Boost**—With its new pipeline, Anglo-Iranian will add 100,000-bbl. a day to the total amount of oil ready for shipment at Persian Gulf ports. Of the daily output at least 40,000-bbl. will go to the U. S.; the rest, to Marshall Plan countries in Europe.

But an increase in tanker production is the most important use of the released steel. Anglo-Iranian's pipeline isn't going to get the oil to U. S. or European consumers. In fact, the additional supplies available at the Persian Gulf may put further strain on the hard-pressed Middle Eastern tanker fleet.

• **Reason for Construction**—Tapline was born of the tanker-vs.-pipeline transportation dispute. The Persian Gulf-to-Mediterranean conduit system would have eliminated the 3,800-mi. tanker haul around the Arabian peninsula—and the 16¢-per-bbl. fee levied on American oil passing through the Suez Canal.

Defense Secretary James Forrestal was

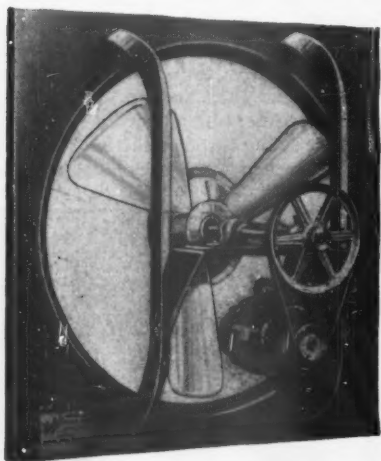


**TAPLINE WORKERS** and Tapline pipe at Ras Tanura refinery on the Persian Gulf

## Thousands of Homes ARE COOLED WITH BREEZ-AIR FANS



Cool, fresh air is constantly drawn in, and hot, stale air forced out through attic openings in this typical BREEZ-AIR installation. Amazingly cool comfort is the economical result!



Quiet, Efficient, Sturdy! Breez-Air Fans have all certified ratings. Blades are proportioned for peak air delivery. Shafts, bearings and mountings are heavy-duty, for attention-free service. Motors are all standard-make. Noise levels are extremely low.

In the "hot" parts of America, where daily summer temperatures rise to between 90° and 100° F., there's no sleeping comfort without an ATTIC Cooling Fan!

With a fan installed in the attic, windows are opened in living and sleeping rooms at sundown and the super-heated indoor air is expelled, replaced by the cooler night air.

Literally, every home owner south of Pittsburgh is a prospective buyer of the Breez-Air Cooling Fan. Users are so well satisfied with the results obtained that they are our best salesmen.

If you live in the South, or visit there, you probably know someone who is using a BREEZ-AIR to keep comfortable at home. Six sizes from 24" to 54". Ask your household appliance dealer for full information.

### BUFFALO FORGE COMPANY

458 Broadway  
Buffalo, N. Y.

Canadian Blower & Forge Co., Ltd.  
Kitchener, Ont.

Branch offices in all principal cities

*"Buffalo"*

**BREEZ-AIR**  
ATTIC COOLING FANS

a staunch Tapline backer up to the outbreak of war in Palestine. He saw it as essential to American military security—a prime source of supply for the U.S. Navy and the Marshall Plan, which is counting on a Middle East oil production of 1.4-million bbl. a day by 1952. At the same time it would ease the impact of a record peacetime demand for oil at home.

• **Stymied**—But when the White House embarked on its devious Palestine policy, both Forrestal and Secretary of State George Marshall saw the handwriting on the wall. As routed, Tapline crosses Trans-Jordan, Syria, and Lebanon after leaving Saudi Arabia. Anti-American sentiment in this area makes it unsafe for pipeline crews to work there. And there is always the threat that the very oil concessions which are to feed the system might be canceled before the Palestine struggle ends.

The notion that dollar revenues from oil will serve to cool the Arabs' passion to control Palestine seems to have little foundation. Under pressure from the Arab League (and with British approval), the Iraq government has shut off the Iraq Petroleum Co.'s pipeline from Kirkuk (Iraq) to Haifa, because the latter is an Israeli port. This pipeline gives the world 15-million bbl. of oil a year, the Iraq government \$1.60 a bbl. in revenues. American interests own just under 25% of Iraq Petroleum Co.)

• **Up for Review**—OIT will review Tapline's request for steel again in the fall. Meanwhile, prospecting is continuing along the proposed Tapline route. So far, more than a dozen promising areas have been mapped. Extension of the existing pipeline to one or more of these fields is always possible; the oil could then be pumped either west or east.

### U. S. WILL EAT FIJI TUNA

Canned tuna fish from the Fiji Islands—1,600 mi. off Australia's west coast—will soon show up on U.S. dinner tables.

Two California fish packers have just made a deal to exploit the islands' tuna trade. They are French Sardine Co. and J. B. Romano Co. With A. C. McCown, a pineapple planter, they will set up two new companies: (1) one in California, with 40% Fiji capital; (2) the other in Fiji, with 40% U.S. capital.

The 1,000-ton fishing ship, Anthony M—built in the U.S. at a cost of \$250,000—has just arrived in Fiji to begin operations. The fish it catches will be processed by canning and sold mostly to the U.S. market.

The new enterprise will also market byproducts (meals, fish fertilizers, vitamin oils). It will ship varieties of fish that are foreign to U.S. palates to other countries.

smoke signals . . .

but

for your overseas message

send it *Via* **RCA**... *it's more direct!*

FAST

CLASS OF SERVICE DESIRED	
FOREIGN	DOMESTIC
FULL RATE	FULL RATE
CDE	DAY LETTER
DEFERRED	SERIAL SERVICE
RADIO LETTER	NIGHT MESSAGE
PRSS	NIGHT LETTER



**RADIOGRAM**  
**RCA COMMUNICATIONS, INC.**

A SERVICE OF RADIO CORPORATION OF AMERICA

TO ALL THE WORLD - BETWEEN IMPORTANT U. S. CITIES - TO SHIPS AT SEA

DIRECT

TO OBTAIN THE  
BENEFIT OF RCA  
DIRECT SERVICE  
THE "VIA RCA"  
**MUST**  
BE INSERTED BY THE  
**SENDER**  
OF THE MESSAGE

Send the following Radiogram subject to the conditions, regulations and rates as set forth in the applicable tariff of RCA Communications, Inc., and on file with the regulatory authority.

*Be sure to write "Via RCA"*

YOUR MESSAGE IS SAFE WITH RCA. WITH THE RCA MODERN TAPE TRANSMISSION METHOD OF RADIO COMMUNICATION, FEWER PEOPLE HANDLE YOUR MESSAGE. AND RCA HAS MORE DIRECT CIRCUITS THAN ANY OTHER COMPANY. THE CHANCE OF HUMAN ERROR IS REDUCED--AND YOUR MESSAGE GOES FASTER, AS WELL AS MORE RELIABLY. VOLUME USERS OF RADIOGRAMS MAY HAVE THEIR OWN TELEPRINTER MACHINES--ASSURING EVEN GREATER SPEED AND ACCURACY.

IT'S SIMPLE TO SEND AN RCA RADIOGRAM OVERSEAS TO ANY PLACE IN THE WORLD. IN NEW YORK, WASHINGTON, D.C. OR SAN FRANCISCO, YOU SIMPLY CALL YOUR LOCAL RCA COMMUNICATIONS OFFICE FOR A MESSENGER. ELSEWHERE, YOU CAN SEND YOUR MESSAGE THROUGH ANY TELEGRAPH OFFICE, BUT BE SURE TO WRITE "VIA RCA" ON THE BLANK. THEN YOUR MESSAGE WILL GO THE BEST WAY --"VIA RCA".

**BE MODERN—RADIO YOUR MESSAGE! *Via* RCA**



More than modern...



an entirely different adding machine

First you'll notice how differently the Clary operates. The keyboard fairly shouts for action. And the smooth, quiet rotary motion gives you the world's fastest operating speed. See its advanced design. Try the handsized keyboard, the fully

automatic control bars, and the exclusive Clary Thumb Add-Bar. Call your local Clary representative today or write to us...we'll be glad to arrange a demonstration for you. Before you buy, be sure to try the Clary Speed-o-lectric.

Backed by factory-supervised service.



**CLARY**

Adds • Subtracts • Multiplies

**NEW**—The Clary all-electric Cash Register offers you more in value, protection, information, and convenience. Ask for a demonstration.

**CLARY MULTIPLIER CORPORATION**, Main Office & Factory 1526 N. Main St., Los Angeles 12, Calif.

**SALES OFFICES:** Clary Factory Branch Offices or Dealers are located in all principal cities. If our representative is not listed in your phone book, write or wire for his address.

Please send me the latest information on Clary all-electric business machines. I am interested in:

- ☐ Cash Registers  
☐ Adding Machines

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

Zone \_\_\_\_\_

State \_\_\_\_\_



## SHANGHAI

**S**HANGHAI—America's circle of friends in China is shrinking. Dollars have proved no substitute for diplomacy. The many U. S. diplomats since the war too often acted like bulls in a China shop.

Washington hasn't even been able to coordinate China's hodgepodge of non-Communist factions. Among these are many influential people who simply can't understand Washington's dollar support of Chiang Kai-shek's government, or U. S. efforts to rebuild Japan.

**T**HE RECENT ANTI-U. S. demonstrations by university students here brought matters to a head. U. S. Consul General John M. Cabot labeled the demonstrations Communist-inspired. Shanghai's Mayor, K. C. Wu, lost no time in echoing him. Certainly the Communists jumped on the anti-U. S. bandwagon. But the drum-beating was not a Communist idea.

According to authoritative reports, its origin had a Machiavellian twist. The CC group—who hold the reins of the Kuomintang political chariot—actually started the whole thing.

The CC was riled at U. S. activity in China's vice-presidential election. U. S. Ambassador J. Leighton Stuart gave his blessing publicly to reform-candidate Gen. Li Tsung-jen, who nosed out CC-favorite Dr. Sun Fo. So the CC was out for revenge.

Through the Ministry of Education, the CC let it be known to the students that there would be no objection from above to anti-American demonstrations. The red flag that the CC waved in front of the students was the premise that the U. S. was building up Japan at China's expense.

When the students took over, it became clear that their real whipping boy was the Chinese government—and the U. S. for helping keep it in office. That puts the CC connivers on the spot. Many quickly joined the chorus denouncing Communist agitators.

The demonstrators were not of the "lunatic fringe." Many Chinese sincerely believe that if it hadn't been for the billions of U. S. aid dollars since the war, Chiang's government would have had to mend its ways. To remain in office the

## LETTER

Kuomintang would have had to pay more than lip service to China's crying needs—land, tax, police, and budget reforms.

Instead, say the dissenters, the dollar pipeline convinced Chiang and his henchmen that all they had to do to stay in power was denounce the Communists in a stentorian voice.

ONLY RECENTLY has there been any visible sign that American dollars may do something more than prop up the Nanking regime. Responsible for the good advertising is the U.S. China Relief Mission (CRM)—successor to UNRRA and forerunner of the China Aid Mission (set up under the Economic Cooperation Administration).

CRM took to heart the blunders of UNRRA. Americans or American-trained Chinese have supervised every inch of its program. As a result there has been almost no misappropriation of supplies or funds. CRM has set up a rationing system in key cities; this has definitely helped provide the mass of the people with food and other supplies at a reasonable price. The Chinese dollar proceeds from the sale of CRM supplies have been turned over to other relief projects.

The arrival of ECA's China Aid Mission—armed with \$400-million and led by San Francisco's ex-mayor, Roger D. Lapham—has put CRM out of business. Now, many Chinese are wondering if the Aid Mission will carry on where CRM left off. The CRM backers are afraid the latest \$400-million will be just another grant to the Chinese government, that Washington doesn't much care how it is spent as long as corruption is kept down.

IF WASHINGTON doesn't follow through, many Chinese will write off the China Aid Mission as another useless job. They make it quite clear that unless a program similar to CRM's is followed—unless CRM's administrators are kept on the new (and bigger) job—they will not go along.

For the U. S., a loss of supporters in this middle-of-the-road group could be a serious blow. They have a good chance of being leaders in any new Chinese government.

# CLARK

## PROPHETS OF PROFITS (In Seven Reels)

Facts—not phantasy—about modern materials handling methods and machines, presented in movies for consideration at your convenience.

How costs—handling costs, production costs—perennial "villains" in commerce and in industry, are meeting their master is demonstrated in seven separate "movies."

See them—in your own office, comfortably, with your own production staff; absorb the prophetic promise of profits to your business implicit in the factual film stories of how Clark fork trucks and towing tractors benefit other businesses.

Clark offers these "Movies" on a loan basis. Tell us the salient facts about your operations so that we can judge intelligently which films will be most valuable to you. Write to:

## CLARK ELECTRIC AND GAS POWERED FORK TRUCKS AND INDUSTRIAL TOWING TRACTORS



INDUSTRIAL TRUCK DIV., CLARK EQUIPMENT COMPANY BATTLE CREEK 42, MICH.  
REPRESENTATIVES IN PRINCIPAL CITIES THROUGHOUT THE WORLD



**FLY A BRIGHT, CLEAN FLAG**

Show your faith in the American way of doing things. Dress up your company buildings, lobbies, reception rooms. Let's fill up those empty flag poles.

**FLY BULLDOG FLAGS**—They look brighter, fly better, wear longer. At leading dealers.

**DETTRA FLAG COMPANY, INC.**  
DEPT. BW, OAKS, MONTGOMERY COUNTY, PA.



**GLOBE SPRINKLERS**  
THE AUTOMATIC FIREMEN

The FIRE calls the firemen—An automatic FIRE ALARM is a feature of the GLOBE Sprinkler System. It operates while the sprinklers are extinguishing the FIRE.

Safeguard your property with this device. Why depend on a passerby for a midnight FIRE alarm?

**GLOBE AUTOMATIC SPRINKLER CO.**  
New York, Chicago, Philadelphia • Offices in nearly all principal cities



**They Pay for Themselves**

**MORE Use**  
For Your LIFT-TRUCK

We can help you palletize materials, parts, products, that are considered "hard to palletize"—and cut your handling costs.

**HOPKINSVILLE WOODCRAFTSMEN, INC.**  
Hopkinsville, Kentucky

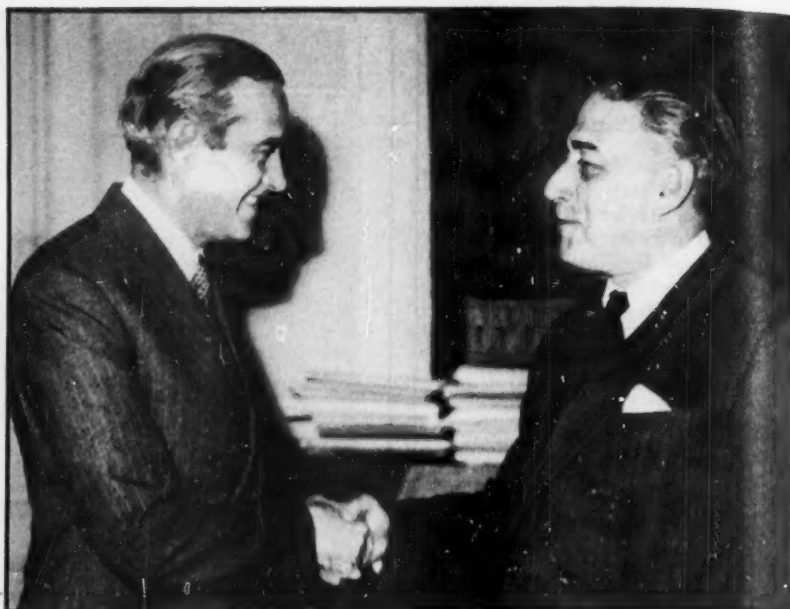
**NEED?** metals, leather, machine parts and tools? We can get them for you thru established resources. Procurement service on fee basis for rated firms only. Whatever your need write

**PURCHASE & CONTACT ASSOCIATES**  
100 East 20th Street, New York 3, N. Y.

**WANTED**

Large engineering firm wishes to acquire several complete plants through purchase of (1) capital stock, (2) assets, (3) machinery and equipment, whole or in part. Personnel retained where possible, strictest confidence.

Box 1251, 1474 Broadway  
New York 14, N. Y.



TWO MEN with a job: ECA's Harriman (left) and France's Mayer must reconcile . . .

## French Squabble on U. S. Aid

Industrialists of France want to keep subsidy on U. S. coal, with ECA holding the bag; claim political stability is at stake. ECA says subsidy is unrealistic and contrary to aid policy.

PARIS—American officials of the Economic Cooperation Administration here were ruefully studying the remnants of a lost illusion this week. ECA had had fond hopes for skirting domestic politics in Europe. Instead, the Paris office found itself square in the middle of a French political-economic squabble. And W. Averell Harriman, ECA's European boss, and French Finance Minister Rene Mayer aren't going to find any easy road out.

The squabble is over the price paid by French industry for coal imported from the U. S. The question: Should industry get subsidized coal; and, if so, should the French government or ECA pay the bill?

• **Devaluation Problem**—Here's what has happened to the price of U. S. coal since devaluation of the French franc in January:

Devaluation spelled soaring prices of vital U. S. raw materials. So the French government pegged the exchange rate for the three most essential imports—petroleum, wheat, coal—at 214 francs to the dollar.

But even the 214 rate looked too high to French industrialists. They persuaded the government to sell them U. S. coal at the old rate of 119 francs to a dollar.

• **Subsidy Problem**—This meant the French government had to dig into its pocket for a big subsidy. Under the U. S.

Interim Aid agreement, and now under ECA, franc proceeds from the sales of U. S. goods must go into a special fund earmarked for French reconstruction. The U. S. insisted that the French toss 214 francs into this reconstruction kitty for every dollar's worth of U. S. coal they bought. So the government sold American coal to industry at a loss of 95 francs per dollar's worth.

Now Mayer wants to kill this subsidy. Ending subsidies has been one of the key tactics of Mayer's campaign to make the French economy pay its own way. Early this year he kicked subsidies out from under the domestic coal industry and half a dozen other nationalized industries.

Industrialists are howling that loss of the subsidy on imported U. S. coal would mean a 20% increase in the overall price of coal; it would also bring a boost in steel prices of 7% to 10%.

• **Labor-Price Deal**—They say they have made a deal with the two non-Communist labor unions, the Forces Ouvrieres and the Catholic Trade Union, to hold wages at their present level. In exchange, industrialists promise to slash prices deeply on all but a few industrial products. The price slash would be added to the 2% to 10% cuts made this week on cars, cotton goods, tractors, and bicycles.

A 20% increase in the price of coal



the industrialists continue, would force them to boost their own prices. This would inevitably put labor on the warpath for new wage increases. The government's anti-inflation offensive—which has been gaining ground—would be stopped dead. This might give the French National Assembly the signal to spill the government off its political tightrope.

• **ECA Subsidy?**—But Mayer is sticking to his guns; he insists that the government can't pay the subsidy any longer. So key French industrialists are begging him to plead with ECA officials to let the French government reimburse the franc reconstruction fund at the rate of 119 francs per dollar's worth of coal imports. (They suggest that to keep the reconstruction kitty's books balanced the French government could give the franc fund I.O.U.'s for the difference; redeem them before the Marshall Plan ends.)

• **ECA Reaction**—Mayer isn't enthusiastic about this suggestion. He has already sounded out ECA officials unofficially. They gave a flat no.

The reaction of ECA officials can be summed up in one sentence: "We can't back political prices." They brand the French proposals as a sort of disguised subsidy.

The French, as ECA people see it, are trying to have their cake and eat it. They want all the exporting advantages of devaluation with none of the importing disadvantages.

The Americans warn that sooner or later—when ECA aid ends—the French will have to face this contradiction. Harriman's aides ask what the French will do if their whole economy is tied to coal imported at the 119 exchange level and they suddenly have to start buying it at an exchange rate somewhere between 262 and 300 francs to the dollar?

• **Worth the Price?**—The French industrialists argue that: The combined impact of ECA, a good harvest, soaring production (industrial production now averaging about 130% of 1938), and the current Communist retreat, gives France the best chance since the war of getting on her feet. They are afraid there won't be another chance. They prophesy prosperity in 1948—if coal doesn't go up; nothing but trouble if it does. So they are asking the U. S. to let them cash in on this good luck now, pay the piper later.

The alternative, they say, is a new inflationary altitude record that would topple the government. They ask ECA officials: "Do you want a government collapse, new general elections, perhaps an open test of strength between De Gaulle and the Communists?"

That's the predicament. Harriman and Mayer are still trying to find an emergency exit.

## ADVERTISERS IN THIS ISSUE

Business Week—June 26, 1948

<b>AIRKEM, INC.</b> ..... 52	<b>KELLER TOOL CO.</b> ..... 86
Agency—Brooks, Smith, French & Durance, Inc.	Agency—The Fensholt Co.
<b>R. C. ALLEN BUSINESS MACHINES, INC.</b> ..... 84	<b>WALTER KIDDE &amp; CO., INC.</b> ..... 82
Agency—Wesley Aves & Assoc.	Agency—Newell-Emmett Co.
<b>ALLIED STRUCTURAL STEEL COS.</b> ..... 14	<b>THE LINDSAY CORP.</b> ..... 4
Agency—The Fensholt Co.	Agency—The Fensholt Co.
<b>AMERICAN AIRLINES, INC.</b> ..... 83	<b>LURIA ENGINEERING CORP.</b> ..... 50
Agency—Ruthrauff & Ryan, Inc.	Agency—Parker-Allston Assoc., Inc.
<b>AMERICAN BRAKE SHOE CO.</b> ..... 12	<b>LYON METAL PRODUCTS</b> ..... 49
Agency—Fuller & Smith & Ross, Inc.	Agency—Reincke, Meyer & Finn, Inc.
<b>AMERICAN GAS ASSOCIATION</b> ..... 107	<b>P. R. MALLORY &amp; CO., INC.</b> ..... 37
Agency—Ketchum, MacLeod & Grove, Inc.	Agency—The Altman-Kynett Co.
<b>AMERICAN OPTICAL CO.</b> ..... 58	<b>MANNING, MAXWELL &amp; MOORE, INC.</b> ..... 100
Agency—Sutherland-Abbott	Agency—Briggs & Varley, Inc.
<b>AMERICAN TELEPHONE &amp; TELEGRAPH CO.</b> ..... 5	<b>THE MARINE MIDLAND TRUST CO. OF N. Y.</b> ..... 28
Agency—N. W. Ayer & Son, Inc.	Agency—Hatten, Barton, Durstine & Osborn, Inc.
<b>AUTOMATIC TRANSPORT CO.</b> ..... 40	<b>THE GLENN L. MARTIN CO.</b> ..... 58
Agency—Ruthrauff & Ryan, Inc.	Agency—Van Sant, Dugdale & Co., Inc.
<b>BALDWIN LOCOMOTIVE WORKS, INC.</b> ..... 87	<b>MCCLOSKEY CO.</b> ..... 86
Agency—Ketchum, MacLeod & Grove, Inc.	Agency—Bond & Starr, Inc.
<b>BANK OF AMERICA</b> ..... 98	<b>MCGRAW-HILL PUBLISHING CO., INC.</b> ..... 54, 55
Agency—Chubb, H. Stuart, Adv.	<b>THE MEAD CORP. &amp; ASSOCIATES</b> ..... 88
<b>BANKERS TRUST CO.</b> ..... 1	Agency—Gray & Rogers
Agency—Cowan & Dendler, Inc.	<b>MERCURY MANUFACTURING CO.</b> ..... 39
<b>BAUSCH &amp; LOMB OPTICAL CO.</b> ..... 94	Agency—O'Grady-Anderson
Agency—Ed Wolff & Assoc.	<b>MERRILL LYNCH, PIERCE, FENNER &amp; BEANE</b> ..... 99
<b>BELL &amp; HOWELL CO.</b> ..... 69	Agency—Albert Frank-Guenther Law, Inc.
Agency—Henri, Hurst & McDonald, Inc.	<b>MICRO SWITCH DIV. OF FIRST IND'L CORP.</b> ..... 61
<b>BELMONT RADIO CORP.</b> ..... 80	Agency—Hamilton Adv. Agency, Inc.
Agency—Brantmont & Hohnan, Inc.	<b>MONSANTO CHEMICAL CO.</b> ..... 6
<b>E. W. BLISS CO.</b> ..... 41	Agency—Gardner Advertising Co.
Agency—Fred Wittner, Adv.	<b>NATIONAL CASH REGISTER CO.</b> ..... 59
<b>BRISTOL BRASS CORP.</b> ..... 29	Agency—McAnn-Erickson, Inc.
Agency—Sutherland-Abbott	<b>NATIONAL-STANDARD CO.</b> ..... 79
<b>BUFFALO FORGE CO.</b> ..... 118	Agency—The Griswold-Eshleman Co.
Agency—Melvin F. Hall Adv. Agency, Inc.	<b>KODAK-EDWARDS PAPER CO.</b> ..... 102
<b>BUR JUGHS ADDING MACHINE CO.</b> ..... 53	Agency—The Cramer-Krasselt Co.
Agency—Campbell-Ewald Co.	<b>NORFOLK &amp; WESTERN RAILWAY CO.</b> ..... 114
<b>BUSINESS WEEK</b> ..... 74, 75	Agency—Houck & Co., Adv.
Agency—Ellington & Co., Inc.	<b>NORTHERN PACIFIC RAILWAY CO.</b> ..... 84
<b>CHAMBERSBURG ENGINEERING CO.</b> ..... 102	Agency—Hatten, Barton, Durstine & Osborn, Inc.
Agency—Willard G. Myers Adv. Agency	<b>THE OHIO CRANKSHAFT CO.</b> ..... 31
<b>CHICAGO WATCHCLOCK CORP.</b> ..... 44	Agency—Care Liggett Adv., Inc.
Agency—Duane Wamansaker Assoc.	<b>OWENS-CORNING FIBERGLAS CORP.</b> ..... 91
<b>CLARK TRACTOR DIV. OF CLARK EQUIPMENT CO.</b> ..... 121	Agency—Fuller & Smith & Ross, Inc.
Agency—Gelhaus & Co.	<b>OZALID PRODUCTS DIV., GEN'L ANILINE &amp; FILM CORP.</b> ..... 109
<b>CLARY MULTIPLIER CORP.</b> ..... 120	Agency—Young & Rubicam, Inc.
Agency—Dana Jones Co.	<b>PACKAGE MACHINERY CO.</b> ..... 92
<b>COLD METAL PRODUCTS CO.</b> ..... 89	Agency—John O. Powers Co.
Agency—H. M. Klingenstein	<b>PATHFINDER</b> ..... 71
<b>COMBUSTION ENGINEERING CO., INC.</b> ..... 97	Agency—Lewis & Gilman, Inc.
Agency—G. M. Basford Co.	<b>PITNEY-BOWES, INC.</b> ..... 77
<b>CONTINENTAL CAN CO., INC.</b> ..... 3rd Cover	Agency—L. E. McGivena & Co., Inc.
Agency—Hatten, Barton, Durstine & Osborn, Inc.	<b>PITTSBURGH CORNING CORP.</b> ..... 72
<b>THE COOPER-BESSEMER CORP.</b> ..... 93	Agency—Hatten, Barton, Durstine & Osborn, Inc.
Agency—The Griswold-Eshleman Co.	<b>PORTLAND CEMENT ASS'N</b> ..... 76
<b>CRANE CO.</b> ..... 111	Agency—Roche, Williams & Cleary, Inc.
Agency—The Granger Co.	<b>PRESSTITE ENGINEERING CO.</b> ..... 60
<b>CROSLLEY MOTORS, INC.</b> ..... 78	Agency—Oakleigh R. French & Assoc.
Agency—The Ralph H. Jones Co.	<b>PURCHASE &amp; CONTACT ASSOCIATES</b> ..... 122
<b>DETTRA FLAG CO., INC.</b> ..... 122	Agency—C. J. Herrick Assoc.
Agency—The Earle A. Buckley Organization	<b>RCA COMMUNICATIONS, INC.</b> ..... 119
<b>DICTAPHONE CORP.</b> ..... 36	Agency—Albert Frank-Guenther Law, Inc.
Agency—Young & Rubicam, Inc.	<b>RADIO CORPORATION OF AMERICA</b> ..... 101
<b>DISTILLATION PRODUCTS, INC.</b> ..... 105	Agency—J. Walter Thompson Co.
Agency—The Griswold-Eshleman Co.	<b>RAPIDS-STANDARD CO., INC.</b> ..... 103
<b>E. I. du Pont de Nemours &amp; Co.</b> ..... 7	Agency—Almon Brooks Wilder, Inc.
Agency—Hatten, Barton, Durstine & Osborn, Inc.	<b>RECORDAK CORP. (SUB. OF EASTMAN KODAK CO.)</b> ..... 116
<b>ELLIOTT ADDRESSING MACHINE CO.</b> ..... 90	Agency—J. Walter Thompson Co.
Agency—Alley & Richards Co.	<b>REMINGTON RAND, INC.</b> ..... 110
<b>EMERSON ELECTRIC MFG. CO.</b> ..... 51	Agency—Lefford Adv. Agency, Inc.
Agency—Winlius-Dresher-Brandon, Inc.	<b>REPUBLIC RUBBER DIV. OF LEE RUBBER &amp; TIRE CORP.</b> ..... 57
<b>FALK CORP.</b> ..... 47	Agency—Meek & Thomas, Inc.
Agency—Hamilton Adv. Agency, Inc.	<b>REVERE COPPER &amp; BRASS, INC.</b> ..... 70
<b>FEDERAL PRODUCTS CORP.</b> ..... 30	Agency—St. Georges & Keys, Inc.
Agency—Doyle, Kitchen & McCormick, Inc.	<b>ALFRED ROBBINS ORGANIZATION</b> ..... 80
<b>FINNELL SYSTEM, INC.</b> ..... 104	Agency—Kaplan & Bruck
Agency—Johnson, Read & Co., Inc.	<b>ROYAL TYPEWRITER CO., INC.</b> ..... 81
<b>FORT WAYNE CORRUGATED PAPER CO.</b> ..... 96	Agency—Young & Rubicam, Inc.
Agency—Doremus & Co.	<b>JOS. T. RYERSON &amp; SON, INC.</b> ..... 27
<b>FRUEHAUF TRAILER CO.</b> ..... 35	Agency—Aubrey, Moore & Wallace, Inc.
Agency—Kudner Agency, Inc.	<b>ST. REGIS PAPER CO.</b> ..... 82, 63
<b>GENERAL AMERICAN TRANSPORTATION CORP.</b> ..... 2, 3	Agency—Robert F. Branch, Inc.
Agency—Weiss & Geller, Inc.	<b>SAFEGUARD CORP.</b> ..... 106
<b>GENERAL BOX CO.</b> ..... 86	Agency—Sanders & Thomas, Inc.
Agency—The Huchen Co. & Box, Inc.	<b>SHERATON CORP.</b> ..... 45
<b>GEN'L ELECTRIC CO., CHEMICAL DEPT.</b> ..... 18	Agency—Arthur W. Sampson Co., Inc.
Agency—Benton & Bowles, Inc.	<b>L. SONNEBORN SONS, INC.</b> ..... 33
<b>GENERAL MILLS, INC.</b> ..... 32	Agency—James Thomas Chirug Co.
Agency—Hatten, Barton, Durstine & Osborn, Inc.	<b>THE STANDARD REGISTER CO.</b> ..... 85
<b>GLOBE AUTOMATIC SPRINKLER CO., INC.</b> ..... 122	Agency—Geyer, Newell & Ganger, Inc.
Agency—Marschalk & Pratt Co.	<b>STROMBERG-CARLSON CO.</b> ..... 65
<b>GLOBE HOIST CO.</b> ..... 41	Agency—Charles L. Rumrill & Co.
Agency—Falrall & Co.	<b>TELEPHONE EXCHANGE, INC.</b> ..... 78
<b>THE B. F. GOODRICH CHEMICAL CO.</b> ..... 11	Agency—The Winer Co.
Agency—The Griswold-Eshleman Co.	<b>TIMKEN ROLLER BEARING CO.</b> ..... 4th Cover
<b>GOODYEAR AIRCRAFT CORP.</b> ..... 46	Agency—Hatten, Barton, Durstine & Osborn, Inc.
Agency—Kudner Agency, Inc.	<b>THE TORRINGTON CO.</b> ..... 48
<b>THE GRAPETEC CO., INC.</b> ..... 46	Agency—Hazard Adv. Co.
Agency—Hrnan & Ryan, Inc.	<b>H. L. VOKES CO.</b> ..... 52
<b>GRAYBAR ELECTRIC CO.</b> ..... 42	Agency—The Wither Adv. Co.
<b>MERCURIES POWDER CO.</b> ..... 64	<b>WAGNER ELECTRIC CORP.</b> ..... 73
Agency—Fuller & Smith & Ross, Inc.	Agency—Arthur R. Morgan, Inc.
<b>HOPKINSVILLE WOOD CRAFTSMEN</b> ..... 122	<b>WEBSTER ELECTRIC CO.</b> ..... 43
<b>A. C. HORN CO., INC.</b> ..... 67	Agency—Hamilton Adv.
Agency—Peck Advertising Agency, Inc.	<b>WESTINGHOUSE AIR BRAKE CO.</b> ..... 38
<b>HUGHES TOOL CO.</b> ..... 2nd Cover	Agency—Ketchum, MacLeod & Grove, Inc.
Agency—Wilhelmsen & Wilson Assoc.	<b>WESTINGHOUSE ELECTRIC CORP.</b> ..... 8
<b>HUNTER PHOTO-COPYIST, INC.</b> ..... 100	Agency—Fuller & Smith & Ross, Inc.
Agency—Barlow Adv. Agency, Inc.	<b>WHITING CORP.</b> ..... 108
<b>MYSTER CO.</b> ..... 95	Agency—The Fensholt Co.
Agency—Simon & Smith	
<b>THE INTERNATIONAL NICKEL CO., INC.</b> ..... 17	
Agency—Marschalk & Pratt Co.	

# THE TREND

## A Fever Chart of Business Confidence

Ask any man how business has been since the end of World War II and he is likely to tell you: "It's really been booming." He isn't likely to recall any of the times in the past three years when there was more sour talk than sweet talk about business.

The chart in the center of the page offers interesting and, to an extent, convincing evidence that business has not been traveling on a level road. Actually, the route has been as rolling as the Western plains.

Business confidence has shifted ten times since V-Day. At the beginning of reconversion, there was much uncertainty about employment prospects for discharged veterans and laid-off war workers. So the chart begins with pessimism prevailing. In the tenth phase—the current one—optimism is the dominant note.

The chart lines show that the trend of wholesale prices closely parallels the variations in sentiment from gloom to glory. Sometimes it is a case of prices being influenced by opinion; at other times, opinion is influenced by price movements.

Lately we seem to be in another inflationary whoosh up the scale. Price of farm products are nearly back to the levels prevailing before the February break. And non-farm prices are moving up daily—you see some price cuts restored while other prices, which were never cut, are also advancing.

Businessmen today are feeling pretty good about things, and well they might. What they ought to do now is look at the situation broadly and decide, if possible, roughly what the length and breadth of the better business outlook is. That sort of look-see would be convincing enough to make a person less panicky the next time a minor jolt occurs to business generally. This is the way things stack up as we see them:

Personal incomes in the U.S. have tripled since 1939. Even after allowing for increases in the cost of living, they are some 70% above the 1939 level. And people have saved more than \$160-billion in the last seven years alone. Their debts at the end of 1947 were estimated at about \$70-billion, not much greater than before World

War II and small in relation to their income and savings.

Farm income has been zooming because of high production and high prices. Farmers' incomes in 1947 totaled more than \$30-billion, three times what they were at the beginning of the war. Farmers' liquid savings are estimated at \$23-billion, five times what they were before the war. And total farm mortgage debt is down to \$5-billion, or \$1.5-billion less than prewar.

No sizable dent has yet been made in the backlog of demand for consumer goods. Biggest unsatisfied markets are in autos and houses. Other durable lines have not yet

met the need for first-time postwar purchasers, much less satisfied repeat demand.

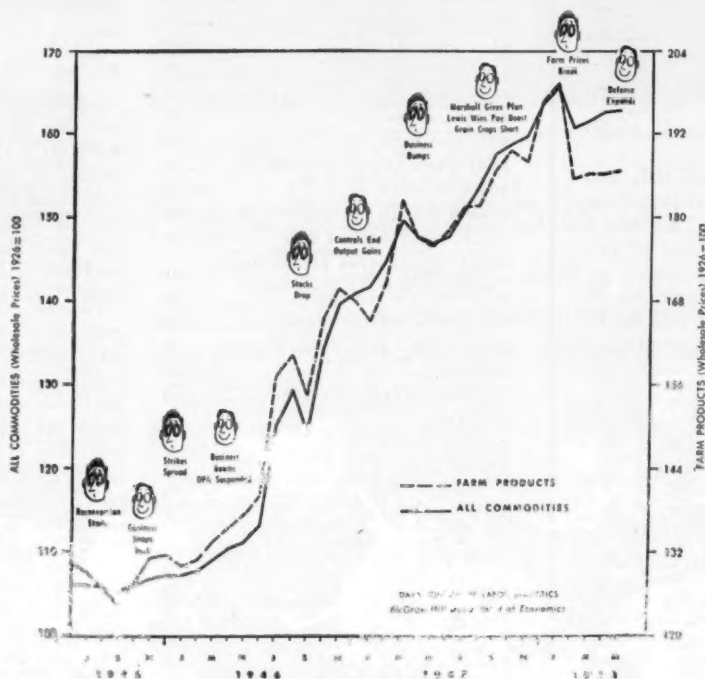
Building construction is riding high. Commercial and industrial expansion remains at a high rate. Investment of about \$75-billion is needed to bring roads, other public works and buildings, up to par.

Those are the big domestic factors that serve today as props to our prosperity. The European Recovery Program and the new U. S. defense program are foreign factors which are also bolstering the economy.

As long as those factors stay at or near their present size, and as long as offsetting factors don't grow larger, business will stay good. That will be true even though we have to wallow a while again in semi-idleness caused by strikes. And it will be basically true despite another drop in the stock market.

Those events, if and when they occur, undoubtedly will cause more jitters. The fever chart of business confidence will record more dips. But businessmen who continue to watch the main course of events and note the overriding trend will keep from getting ulcers—unlike those who may take secondary shifts too seriously.

Of course, the very fact that business confidence wavers in tune with prices induces a thought of caution. As long as prices are moving upward, business appears to be good. But if inflation gets too strong a hold, business will suffer. The latest renewal in the price advance, largely attributable to the third-round wage boosts, may bring the U. S. economy into the area of real danger.



ings.  
pro-  
1947  
were  
s are  
efore  
5-bil-

g of  
rkets  
t yet  
first-  
chas-  
shed

tion  
mer-  
l ex-  
at a  
nt of  
is  
oads,  
and

r.  
big  
that  
s to  
The  
overy

new  
gram  
ctors  
ster-

for  
their  
grow  
even  
ness  
spite

tedly  
onfi-  
con-  
the  
nlike

avers  
. As  
to be  
will  
rgely  
bring

1948

40-  
30-  
20-  
10-  
00-  
90-  
80-  
70-

160-  
150-  
140-

70-  
60-  
50-  
40-  
30-  
20-  
10-  
0-

BUS  
WE  
IND